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## M60A1A0S Tank Gunnery Data Handbook

by

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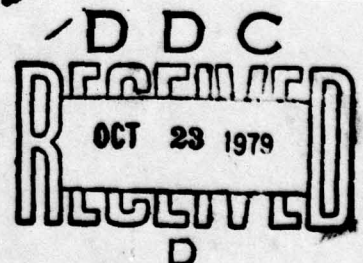
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report briefly reviews the methods used in developing a model test of tank crew marksmanship and presents the detailed task analysis data base developed in the course of that effort. (See ARI Technical Report TR-78-A24 by Wheaton, Fingerman, & Boycan, 1978; AD No. A061-152) Descriptions are included of 266 job objectives that represent all of the ways an M60A1AOS tank is capable of engaging a threat target under current doctrine. Each objective is described in terms of the conditions of the engagement and the (Continued)		

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→ precise behaviors which each crew member must perform. The objectives are organized into clusters which are homogeneous in content, thus facilitating the use of the data base for development of training programs, design and evaluation of training devices, and test development. Also included are computing algorithms and program listings for measuring certain characteristics of engagements, including behavioral generalizability (the extent to which performance on one specific engagement may predict performance on others) and behavioral coverage (the extent to which all possible tank crew behaviors are represented by a subset of engagements).

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## M60A1A0S TANK GUNNERY DATA HANDBOOK

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### INTRODUCTION

The purpose of the first phase of the IDOC-II ("Identification of Doctrine for Tank Crews") project was the development of a criterion-referenced test of tank crew marksmanship. During the course of developing the model test it was necessary to review and compile information on current tank gunnery doctrine, so as to generate a data base which could be viewed as representing the entire domain of tank gunnery. That is, the domain would represent all possible ways (under current weapon system capability and doctrinal constraints) that the M60A1A0S main battle tank could engage unfriendly forces. Further, the content requirements of the test development methodology made it necessary that these descriptions of engagement conditions be extremely detailed. While a description of the process of developing the model test is presented elsewhere (Wheaton, Fingerma, & Boycan, 1978) it was felt that a separate presentation of the data base, representing the job-objectives comprising the domain of M60A1A0S tank gunnery as it stood in the summer of 1977, would be valuable. Such a presentation is the purpose of this document.

The next section (Method) reviews the history of the gunnery objectives, and how they evolved into their present form. The final sections (in the form of four appendixes) present the job objectives and their component behavioral elements, together with a description of the computer programs used to analyse them.

## METHOD\*

Initial specification of the domain of tank gunnery was based on an earlier effort (IDOC-I) in which a list of 225 job objectives was developed (Kraemer, Boldovici, and Boycan, 1976). These objectives defined all possible ways that targets could be neutralized with the main gun, coaxial machinegun, and .50 caliber machinegun weapons of the M60A1A0S tank system. The description of each objective in the pool of 225 consisted of three components: a conditions statement, a task statement, and a standards statement. A typical objective was:

Given (a) a stationary M60A1A0S tank with the main gun battlesighted with SABOT or HEAT, (b) an operational gunner's day periscope, and (c) a stationary tank or light-armored vehicle target that is visible at less than 1100 meters without artificial light at day or night; the gunner will open fire within 7 seconds of the alert element of the tank commander's (TC's) command, and neutralize the target within 12 seconds, using no more than two rounds.

Each of the objectives was written in the form of the example cited above. The task and standards components of the objective were, in all cases,

"...open fire within \_\_\_\_\_ seconds of the alert. . . , and neutralize the target within \_\_\_\_\_ seconds, using no more than \_\_\_\_\_ rounds."

Objectives for inclusion in the pool were formed by combining levels of 11 conditions associated with hypothetical engagements and attaching these combinations to the task and standards statements. The 11 conditions were: crew member firing, weapon, fire-delivery method, firing vehicle motion, target motion, target type, target visibility, target range, day vs. night firing, fire-control instrument, and ammunition. Levels within each condition are listed in Table 1.

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\* This section is adapted from Wheaton, Fingerman, & Boycan, 1978.



**Table 1. Engagement Conditions and Levels of Conditions Used to Define the Job-Objective Pool**

(Adapted from Kraemer, et al. 1976)

Crew Member	Weapon	Firing Mode	Firing Vehicle Motion	Target Motion	Target Type	Target Visibility	Day or Night	Fire Control Instrument	Ammunition	Target Range
1. Gunner	Main Gun	Battlelight	Stationary	Stationary	Thin-skinned Vehicle (TSV)	Visible	Day or Night	Range-finder, Day	SABOT or HEAT	≤ 1600 meters
2. Tank Command or	Coax	Precision	Moving	Moving	Tank (TNK) or Light Armored Vehicle (LAV)	Visible using artificial illumination	Night	Range-finder, Infrared (Mesa-scope)	HEP	≤ 1000 meters
3. Driver	.50 Caliber	Non-precision	Moving to-halt		TSV or Crew-Served Weapon	Not visible		Tank Commander's Periscope, Day Light	BEEHIVE	500-4400 meters
4. Loader		Range Card			Bunker or Crew-Served Weapon			Tank Commander's Periscope, Infrared	Coax 7.62 mm	500-3200 meters
5.		Range Card-lay-to-direct-fire			Troops			Gunner's Periscope, Day Light	.50 Caliber Machinegun	≤ 4400 meters
6.					LAV or Crew-Served Weapon			Gunner's Periscope, Infrared		500-1600 meters
7.					LAV			Telescope		≤ 3200 meters
8.					LAV or Crew-Served Weapon or Troops			Infinity Sight		500-1200 meters
9.					Aircraft			Auxiliary Fire Controls		≤ 900 meters
10.					All targets					≤ 2300 meters

Several sets of revisions were made in the 225 job objectives defined by Kraemer, et al. (1975). The revisions were undertaken to reflect emerging gunnery doctrine, and in response to reviews by the project staff and by personnel from the Weapons Department of the U.S. Armor School and the Directorate of Training Developments, Fort Knox, Kentucky. When deciding whether to modify, delete, or add an objective, the reviewers were guided by the capabilities of the M60LAØS weapon system and current doctrine and not by what kinds of engagements form the basis of training or by what engagements are typically fired. The original pool of objectives included, for example, precision engagements fired from moving tanks. Current doctrine dictates, however, that the firing vehicle will come to a brief halt before engaging targets in the precision mode. Thus, in order to update the domain in accordance with this doctrinal change, precision engagements fired on-the-move were redefined to be fired after moving to a halt. Other changes in doctrine led, for example, to the deletion of coaxial machinegun engagements fired in the precision mode, as well as main gun engagements fired by the tank commander at night with the aid of his metascope. Still other objectives were added to the original pool to reflect possible encounters with aircraft targets, moving targets in range-card-lay-to-direct-fire engagements, etc. Collectively, these revisions resulted in a net addition of 41 job objectives, increasing the pool from 225 to 266.

Once the job objectives forming the gunnery domain had been defined in terms of system capabilities and doctrinal constraints, the next step was to characterize each job objective in behavioral terms.

Detailed descriptions of the activities of each crew member (i.e., tank commander, gunner, driver, and loader) were developed for each of the 266 tank gunnery job objectives. Members of the project staff who were subject-matter experts listed the behavioral elements for each crew member involved in each job objective. Examples of behavioral elements are: "Loader announces 'Up'", "Gunner indexes HEP", and "Gunner levels bubble."

Certain "system state" assumptions had to be made early in the analysis in order to achieve consistency in specifying which behavioral elements were and were not included in each objective. If the weapons were assumed to be loaded, for example, then the behavioral elements involved in a target engagement would be different from those that would be involved if the weapons were assumed to be unloaded. Specifying the ground rules under which the analysis would occur began with two sets of assumptions:



1. If the target to be engaged is visible without artificial illumination, then the firing vehicle will be in the battlesight mode, in which all weapons are loaded and SAFED, and the firing switches are OFF. The turret power, computer, primary direct fire control instruments, main gun stabilization system are ON; and the caliber fifty machine-gun rate of fire selector is in LOW. Depending on type of target being engaged, the appropriate ammunition is indexed into the computer and the corresponding range is indexed into the rangefinder (e.g., 1100 meters for HEAT and 1600 meters for SABOT).

2. If the target to be engaged is not visible under any circumstances, or is visible only if artificially illuminated, then the firing vehicle will be in the range card mode, in which a range card has been made out for HEP ammunition, the main gun is not loaded, and the brakes are locked. The machineguns are fully loaded and all weapons are SAFED. The turret power, computer, primary fire control instruments, main gun stabilization system, and the firing switches are OFF.

Additional assumptions, pertaining to weapons, ranging, fire control instruments, firing vehicle and target motion, and range were also required:

3. When firing using the range-card-lay-to-direct-fire mode, ranging is required, regardless of range, once the target is illuminated with either white light or illuminating shell.

4. The Tank Commander will not range on main gun targets at night using the metascope attached to the rangefinder.

5. Ranging and tracking are right-handed operations for the Tank Commander and cannot be performed at the same time. When firing from a moving vehicle or at a moving target, the Tank Commander is therefore not ranging.

6. When firing the coaxial machinegun in the battlesight mode, the Tank Commander will announce "Coax, Battlesight" in the ammunition element of the fire command.

7. When firing the coaxial machinegun, the Tank Commander will estimate range.

8. Although aim-off is only applied at ranges beyond 1600 meters, aim-off is considered a relevant task element to be included in those job objectives where the range given in the job objectives is either 500 to 3200 meters or 1100 to 3200 meters.

9. When the Tank Commander is firing the main gun because the gunner cannot identify the target, the gunner is using the sight that is appropriate for the target engagement (i.e., periscope for SABOT or HEAT, telescope for HEP or BEEHIVE).

10. Targets to be engaged using battlesight are engaged while the firing vehicle is stationary, on the move, or from a brief halt.

11. Targets to be engaged using precision gunnery are engaged while the firing vehicle is stationary, or has come to a brief halt.

12. Targets to be engaged using range card data are engaged from the static position at which the range card was prepared.

13. When the Tank Commander is firing at a moving target using range-card-lay-to-direct-fire, he fires using the range indexed into the range finder.

14. Troops are considered to be stationary area targets for machinegun engagements, while bunkers, crew-served weapons, and light-armored vehicles are considered stationary point targets.

15. Because of difficulties in ranging, main gun engagements occur at ranges  $\geq$  500 meters.

16. The coax machinegun ranges are  $\leq$  900 meters.

17. The infrared engagements are conducted at a range of  $<$  1000 meters between the target and the firing vehicle (and the target and illuminating vehicle).

18. The ranges for battlesight HEAT engagements are  $\leq$  1100 meters.

19. Beehive precision engagements are fired at ranges  $\leq$  1200 meters.

20. The ranges for battlesight SABOT engagements are  $\leq$  1600 meters.

21. The ranges for caliber .50 engagements with the TC periscope and non-aircraft targets are restricted to  $\leq$  1600 meters.



22. HEP engagements of moving targets are limited to ranges  $\leq$  1600 meters.

23. The ranges for caliber .50 engagements with the TC periscope and aircraft targets are restricted to  $\leq$  2300 meters.

24. Gunner periscope precision and RCLDF engagements can be fired at ranges  $\leq$  4400 meters.

25. Telescope precision engagements can be fired at ranges  $\leq$  3200 meters.

26. Telescope RCLDF SABOT/HEAT engagements can be fired at ranges  $\leq$  4400 meters.

27. Rangefinder engagements can be fired at ranges  $\leq$  4400 meters.

28. Night engagements are fired with white-light or flares at ranges  $\leq$  1600 meters and flares at ranges  $\leq$  4400 meters.

These assumptions pertain to conditions that exist during and shortly before target engagement. Assumptions also had to be made about the termination of target engagements.

Recall that the job objectives do not specify whether a first- or second-round hit is to be achieved. The possibility of accomplishing a job objective in more than one way (i.e., neutralizing a target with the first or second round) presented a problem for the present analysis, because the number and kinds of behavioral elements in any job objective will differ depending on whether or not a first-round hit is achieved. The obvious way to solve this problem is to assume either that all engagements will terminate in a first-round hit, or that all engagements will result in a first-round miss followed by adjustment of fire and refiring. Because neither of these assumptions is consistent with the results of real target engagements, we were reluctant to adopt one or the other; and since no *a priori* compromise was apparent, two data matrices were generated -- one which identified the task elements involved in accomplishing each objective via a first-round hit, and another which identified the task elements involved in accomplishing each objective by firing, missing, adjusting fire, firing again, and achieving a second-round hit.

To facilitate the behavioral descriptions, a job objective/behavioral element data matrix was generated as shown in Figure 1. Arabic numerals were assigned to each of the 226 job objectives and were entered along the left margin of

Job Objective Number	Behavioral Element Number												114
	1	2	3	4	5	6	7	8	9	10	11	12	
1	1	1	1	1	1	0	0	0	0	0	0	0	
2	1	1	1	1	1	1	1	1	0	0	0	0	
3	1	1	1	1	0	0	0	0	1	1	1	1	
4													
5													
6													
7													
8	1	1	1	1	1	0	0	0	1	1	0	1	
266													

Figure 1. Job objective-behavioral element data matrix.



a large matrix. The analysts then listed the task elements for each crew member involved in the first job objective and coded these by entering numbers across the top of the matrix. A "1" was then entered under each task-element number in the row for Objective #1, indicating that performance of the objective required performance of each of the behavioral elements in the row. The behavioral elements for Objective #2 were then specified. Any new elements -- ones that were not included in Objective #1 -- were coded and their numbers added to the top row of the matrix. The same was done for Objective #3 and for the remaining 263 objectives. An example of the specification of behavioral elements is given for Objective #5 in Table 2. When coded and entered into the eighth (objective) row in the data matrix (Figure 1), these behavioral elements would describe a pattern of "1"'s and "0"'s uniquely associated with Objective #5. A "1" indicated that a behavioral element occurred during the crew's performance of that objective, while "0" entries indicated elements that were not involved.

The number of behavioral elements required to describe the 266 objectives using the first-round hit assumption was 114. An additional 21 elements were associated with subsequent-round engagements in which fire was adjusted by means of either burst-on-target technique (eight additional elements), a standard range adjustment (six additional elements), or a subsequent fire command (seven additional elements). As indicated earlier, which of these three methods (if any) should be appended to the description of the basic objectives would ultimately depend upon after-the-fact information about a specific engagement. That is, did the first round miss and if so, what method of adjustment was appropriate? In light of this indeterminacy, and the fact that inclusion of a subsequent method of engagement would at most increase the pool of behavioral elements by only 7 percent (8/114), it was decided to use only the primary pool of 114 elements associated with firing of the first round. The list of behavioral elements used to describe the objectives is presented in Table 3.\*

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\* As with the set of job objectives, the list of task elements was revised several times with the assistance of the Weapons Department of the Armor School at Fort Knox. This process continues as doctrine and practice are revised. Two of the 114 elements were deleted while the work described here was in progress (see Table 3).

**Table 2. SAMPLE JOB OBJECTIVE DESCRIBED IN TERMS OF TASK ELEMENTS  
AND ELEVEN GENERAL CONDITIONS**

Job Objective No. <u>5</u>	Crew Member: <u>Gunner</u>	Weapon: <u>Main Gun</u>	Firing Mode: <u>Battlesight</u>
Vehicle Motion: <u>Moving</u>	Target Motion: <u>Moving</u>	Target Type: <u>Tank or LAV</u>	
Target Visibility: <u>Visible</u>	Target Range: <u>&lt;1600 Meters</u>	Day/Night: <u>Day or Night</u>	
Fire Control Instrument: <u>Telescope</u>	Ammunition: <u>Sabot or Heat</u>		
<b>TANK COMMANDER BEHAVIORS:</b>			
1	TC Announces "Gunner"		
16	TC Announces "Battlesight"		
45	TC Announces "Moving"		
44	TC Announces Target Description		
25	TC Lays Gun for Direction		
90	TC Announces "Fire" or "At My Command, . . . Fire"		
<b>GUNNER BEHAVIORS:</b>			
36	Gunner Turns on Main Gun Switch		
42	Gunner Selects Sabot or Heat Reticle		
47	Gunner Announces "Identified"		
74	Gunner Applies Lead in Direction of Target Apparent Motion		
77	Gunner Lays Rangeline Leadline at Center of Base of Target		
94	Gunner Times Shot		
98	Gunner Announces "On the Way"		
100	Gunner Fires Main Gun		
<b>LOADER BEHAVIORS</b>			
14	Loader Unlocks Ammo Ready Rack		
26	Loader Selects Sabot or Heat		
31	Loader Places Main Gun Safety in Fire Position		
33	Loader Announces "Up"		
<b>DRIVER BEHAVIORS</b>			
8	Driver Maintains Steady Rate of Speed		
9	Driver Maneuvers Tank for Firing		
10	Driver Announces Adverse Terrain Conditions		



Table 3

BEHAVIORAL ELEMENT DESCRIPTIVE LABELS

Tank Commander Elements

- 1 TC ANNOUNCES "GUNNER"
- \*2 TC ANNOUNCES "GUNNER, DIRECT FIRE"
- 3 TC ANNOUNCES "CALIBER FIFTY"
- 4 TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
- 5 TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION
- 6 TC ANNOUNCES "BATTLESIGHT"
- 7 TC ANNOUNCES "SABOT" OR "HEAT"
- 8 TC ANNOUNCES "HEP"
- 9 TC ANNOUNCES "BEEHIVE TIME"
- 10 TC ANNOUNCES "AREA FIRE" OR "ONE, TWO....ROUNDS, HEP"
  
- 11 TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"
- 12 TC ANNOUNCES "COAX"
- \*13 TC ANNOUNCES "WHITELIGHT"
- 14 TC ANNOUNCES "REDLIGHT"
- 15 TC LAYS GUN FOR DIRECTION
- 16 TC ANNOUNCES "INDEX HEP, FIRE BEEHIVE" OR "BEEHIVE, TIME"
- 17 TC INDEXES RANGE INTO RANGEFINDER
- 18 TC ANNOUNCES TARGET DESCRIPTION
- 19 TC ANNOUNCES "MOVING"
- 20 TC ANNOUNCES "DRIVER, STOP"
  
- 21 TC RANGES
- 22 TC ANNOUNCES RANGE
- 23 TC ANNOUNCES DEFLECTION
- 24 TC VERIFYS DEFLECTION READBACK
- 25 TC ANNOUNCES QUADRANT ELEVATION
- 26 TC VERIFYS QUADRANT ELEVATION READBACK
- 27 TC LAYS CROSSHAIR AT CENTER OF BASE OF TARGET
- 28 TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- 29 TC APPLIES AIM-OFF (RANGE > 1600 METERS)
- 30 TC APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE
  
- 31 TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- 32 TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET
- 33 TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
- 34 TC LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY
- 35 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
- 36 TC ANNOUNCES "FROM MY POSITION"
- 37 TC MAKES FINAL PRECISE LAY
- 38 TC TIMES SHOT
- 39 TC ANNOUNCES "ON THE WAY"
- 40 TC FIRES MAIN GUN

\* Not currently used.

Table 3 (Continued)

BEHAVIORAL ELEMENT DESCRIPTIVE LABELS

Tank Commander Elements (Cont'd.)

- 41 TC FIRES COAX
- 42 TC FIRES CALIBER FIFTY
- 43 TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
- 44 TC ADJUSTS CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS
- 45 TC ADJUSTS CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS
- 46 TC ADJUSTS COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- 47 TC ADJUSTS COAXIAL MACHINEGUN BURST FOR AREA TARGETS
- 48 TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS
- 49 TC TURNS RANGEFINDER RETICLE SIGHT ON
- 50 TC ESTIMATES RANGE
  
- 51 TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- 52 TC LAYS COAX FOR DIRECTION ON EDGE OF TARGET
- 53 TC TURNS INFRARED SIGHT ON
- 54 TC LAYS M85 FOR DIRECTION ON EDGE OF TARGET

Gunner Elements

- 55 GUNNER TURNS ON TURRET POWER
- 56 GUNNER TURNS ON MAIN GUN SWITCH
- 57 GUNNER TURNS ON COAX SWITCH
- 58 GUNNER INDEXES HEP
- 59 GUNNER INDEXES APERS
- 60 GUNNER SELECTS SABOT OR HEAT RETICLE
- 61 GUNNER SELECTS HEP RETICLE
- 62 GUNNER ANNOUNCES "IDENTIFIED"
- 63 GUNNER ANNOUNCES "CANNOT IDENTIFY"
- 64 GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
  
- 65 GUNNER READS BACK DEFLECTION
- 66 GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- 67 GUNNER READS BACK QUADRANT ELEVATION.
- 68 GUNNER LEVELS BUBBLE
- 69 GUNNER REINDEXES SABOT OR HEAT
- 70 GUNNER REINDEXES BEEHIVE
- 71 GUNNER LAYS CROSSHAIR AT CENTER OF BASE OF TARGET
- 72 GUNNER LAYS RANGELINE AT CENTER OF BASE OF TARGET
- 73 GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- 74 GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY



Table 3 (Continued)

BEHAVIORAL ELEMENT DESCRIPTIVE LABELS

Gunner Elements (Cont'd.)

- 75 GUNNER APPLIES AIM-OFF (RANGE >1600 METERS)
- 76 GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET
- 77 GUNNER APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE
- 78 GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- 79 GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET
- 80 GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET
- 81 GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
- 82 GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY
- 83 GUNNER LAYS CIRCLE RETICLE AT INTERPOLATED LEAD POINT FOR TARGET
- 84 GUNNER MAKES FINAL PRECISE LAY
  
- 85 GUNNER TIMES SHOT
- 86 GUNNER ANNOUNCES "ON THE WAY"
- 87 GUNNER FIRES MAIN GUN
- 88 GUNNER FIRES COAX
- 89 GUNNER ADJUSTS COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- 90 GUNNER ADJUSTS COAXIAL MACHINEGUN BURST FOR AREA TARGETS
- 91 GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"
- 92 GUNNER TURNS INFRARED SIGHT ON
- 93 GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- 94 GUNNER LAYS COAX FOR DIRECTION ON EDGE OF TARGET

Driver Elements

- 95 DRIVER MAINTAINS STEADY RATE OF SPEED
- 96 DRIVER MANEUVERS TANK FOR FIRING
- 97 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
- 98 DRIVER MOVES TO HULL DOWN FIRING POSITION
- 99 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
- 100 DRIVER BRAKES

Loader Elements

- 101 LOADER UNLOCKS AMMO READY RACK
- 102 LOADER SELECTS SABOT OR HEAT
- 103 LOADER SELECTS HEP
- 104 LOADER SELECTS BEEHIVE
- 105 LOADER UNLOADS MAIN GUN
- 106 LOADER LOADS MAIN GUN
- 107 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

Table 3 (Continued)

BEHAVIORAL ELEMENT DESCRIPTIVE LABELS

Loader Elements (Cont'd.)

- 108 LOADER PLACES COAX SAFETY IN FIRE POSITION
- 109 LOADER ANNOUNCES "UP"
- 110 LOADER ANNOUNCES "HEP, UP"
- 111 LOADER ANNOUNCES "BEEHIVE, UP"
- 112 LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE
- 113 LOADER STOMS ROUND
- 114 LOADER MOVES TO POSITION FOR OBSERVATION



The description of job objectives in terms of behavioral elements was required in order to analyze objectives in the gunnery domain for test development purposes. First, the data matrix indicating which objectives contained which crew behaviors was subjected to a statistical procedure known as cluster analysis. This analysis was undertaken to find groups of job objectives that were relatively similar or homogeneous in terms of their behavioral content. The result was a set of 16 clusters, containing anywhere from two to 56 job objectives each. Because of the similarity or homogeneity of content within each cluster, and the relative heterogeneity across clusters, these groupings represent organized "chunks" of crew gunnery which may be used to prepare training programs, or, as in the case of this project, to sample items for test development.

The final step in the analysis of the gunnery-objective/behavioral-element data was to determine, within each cluster, the single objective which best represents all of the other objectives in the cluster. A formula was developed which theoretically predicts the "generalizability" of performance from each objective in a cluster to the remainder of the cluster. Thus, each objective in a cluster could be characterized in terms of the likelihood that performance on that objective would be consistent with performance on each of the remaining objectives in the cluster. In the present project, such generalizability was one criterion used to sample test items from within each cluster.

It became clear in the course of the project that a presentation of the detailed task analytic data in expanded form (see Table 2) would be of value to task analysts, designers of operational and training equipment, and personnel responsible for training and evaluating armor crewmen. In addition it serves as a detailed record of the data employed in the present project. Tabular descriptions of the tank gunnery objectives were therefore prepared, using a computer program and data from the 0/1 objective/element matrix. Appendix A of this report consists of those descriptions, organized by cluster or family of gunnery objectives, and within clusters by generalizability.

Appendix B contains two algorithms. The first is used to estimate generalizability as discussed earlier in this report. The second should be of particular interest to a variety of personnel since it enables one to determine what percentage of the fundamental behavioral elements are included in any set of exercises. Such information obviously would be of value in designing training tables or in constructing tests of particular aspects of gunnery.

Appendix C contains a listing of the program used to generate generalizability estimates for sets of objectives and/or information about the coverage of behavioral elements. Readers interested in further details of the analytic process are referred elsewhere (Wheaton et al., 1978).

The job-objective numbering system used by Wheaton et al. has been revised to simplify this report. A cross-reference from the numbers used by Wheaton et al. to those used in Appendix A is included as Appendix D.



#### REFERENCES

Kraemer, R. E., Boldovici, J. A., & Boycan, G. G. Job Objectives for M60ALAOS Tank Gunnery. Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. Research Memorandum 76-9, April 1976.

Wheaton, G. R., Fingerman, P. W., & Boycan, G. G. Development of a Model Tank Gunnery Test. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences Technical Report TR-78-A24, August 1978.

## APPENDIX A

### M60A1AØS GUNNERY OBJECTIVES AND COMPONENT BEHAVIORAL ELEMENTS

This appendix contains detailed descriptions of each of the 266 job objectives identified for crew gunnery on the M60A1AØS tank. The material is organized as follows:

The 266 job objectives are organized by cluster, and are presented one to a page in order of decreasing generalizability within the cluster.

Each cluster begins with a summary page, listing the objectives included in the cluster (ordered by decreasing generalizability), and the conditions of engagement that define each objective.

Table A-1 shows the numbers of job objectives included in each cluster, and a general description of the content of objectives in the cluster.



TABLE A-1  
Table of Contents for Detailed Job  
Objective Task Analysis Data

Cluster Number	First Objective *	thru Last Objective	General Description of Cluster	Summary Page No.
1	1	30	Gunner, Main Gun, Battlesight, SABOT/HEAT	A-3
2	31	42	TC, Main Gun, Battlesight, SABOT/HEAT	A-34
3	43	58	Gunner, Main Gun, Precision, SABOT/HEAT	A-47
4	59	66	TC, Main Gun, Precision, SABOT/HEAT	A-64
5	67	90	Gunner, Main Gun, Precision, HEP/BEEHIVE	A-73
6	91	102	TC, Main Gun, Precision, HEP/BEEHIVE	A-98
7	103	112	Gunner, Main Gun, Range-Card, HEP/BEEHIVE	A-111
8	113	118	Gunner, Main Gun, Range-Card, SABOT/HEAT	A-122
9	119	120	TC, Main Gun, Range-Card, SABOT/HEAT	A-129
10	121	123	TC, Main Gun, Range-Card, HEP/BEEHIVE	A-132
11	124	179	Gunner, Coax, Non-Precision	A-136
12	180	192	Gunner, Coax, Range-Card,	A-194
13	193	216	TC, Coax, Non-Precision	A-208
14	217	222	TC, Coax, Range-Card	A-233
15	223	237	TC, .50 Caliber, Infra-red Periscope	A-240
16	238	266	TC, .50 Caliber, Daylight Periscope	A-256

\*See also Appendix D.

# Cluster 1

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
1	GUNNER	MG	BS	MH	M	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	<1600
2	GUNNER	MG	BS	MH	M	TNK/LAV	VAL	N	TEL	SAB/HEAT	<1600
3	GUNNER	MG	BS	MH	M	TNK/LAV	VAL	N	GPI	SAB/HEAT	<1000
4	GUNNER	MG	BS	M	M	TNK/LAV	VAL	N	TEL	SAB/HEAT	<1600
5	GUNNER	MG	BS	M	M	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	<1600
6	GUNNER	MG	BS	M	M	TNK/LAV	VAL	N	GPI	SAB/HEAT	<1000
7	GUNNER	MG	BS	MH	M	TNK/LAV	VAL	N	GPD	SAB/HEAT	<1600
8	GUNNER	MG	BS	MH	M	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	<1600
9	GUNNER	MG	BS	M	S	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	<1600
10	GUNNER	MG	BS	M	S	TNK/LAV	VAL	N	TEL	SAB/HEAT	<1600
11	GUNNER	MG	BS	M	S	TNK/LAV	VAL	N	GPI	SAB/HEAT	<1000
12	GUNNER	MG	BS	M	M	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	<1600
13	GUNNER	MG	BS	M	M	TNK/LAV	VAL	N	GPD	SAB/HEAT	<1600
14	GUNNER	MG	BS	M	S	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	<1600
15	GUNNER	MG	BS	M	S	TNK/LAV	VAL	N	GPD	SAB/HEAT	<1600
16	GUNNER	MG	BS	MH	S	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	<1600
17	GUNNER	MG	BS	MH	S	TNK/LAV	VAL	N	TEL	SAB/HEAT	<1600
18	GUNNER	MG	BS	MH	S	TNK/LAV	VAL	N	GPI	SAB/HEAT	<1000
19	GUNNER	MG	BS	S	M	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	<1600
20	GUNNER	MG	BS	S	M	TNK/LAV	VAL	N	TEL	SAB/HEAT	<1600
21	GUNNER	MG	BS	S	M	TNK/LAV	VAL	N	GPI	SAB/HEAT	<1000
22	GUNNER	MG	BS	MH	S	TNK/LAV	VAL	N	GPD	SAB/HEAT	<1600
23	GUNNER	MG	BS	MH	S	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	<1600
24	GUNNER	MG	BS	S	M	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	<1600
25	GUNNER	MG	BS	S	M	TNK/LAV	VAL	N	GPD	SAB/HEAT	<1600
26	GUNNER	MG	BS	S	S	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	<1600
27	GUNNER	MG	BS	S	S	TNK/LAV	VAL	N	TEL	SAB/HEAT	<1600
28	GUNNER	MG	BS	S	S	TNK/LAV	VAL	N	GPI	SAB/HEAT	<1000
29	GUNNER	MG	BS	S	S	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	<1600
30	GUNNER	MG	BS	S	S	TNK/LAV	VAL	N	GPD	SAB/HEAT	<1600



JOB OBJECTIVE NO. 1 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER SELECTS SABOT OR HEAT RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 2    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 3 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ANNOUNCES "DRIVER, STOP"

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

DRIVER MOVES TO HULL DOWN FIRING POSITION

DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT

DRIVER BRAKES

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JOB OBJECTIVE NO. 4      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: BATTLESIGHT
VEHICLE MOTION: MOVING      TARGET MOTION: MOVING      TARGET TYPE: TANK OR LAV
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1600 METERS      DAY/NIGHT: NIGHT
FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: SABOT OR HEAT
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "BATTLESIGHT"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER SELECTS SABOT OR HEAT RETICLE
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET
GUNNER TIMES SHOT
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
=====

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00 OBJECTIVE NO. 5      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: BATTLESIGHT
VEHICLE MOTION: MOVING      TARGET MOTION: MOVING      TARGET TYPE: TANK OR LAV
TARGET VISIBILITY: VISIBLE      TARGET RANGE: <1600 METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: SABOT OR HEAT
=====

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "BATTLESIGHT"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"
=====

GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER SELECTS SABOT OR HEAT RETICLE
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET
GUNNER TIMES SHOT
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====

LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====

DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
=====

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JOB OBJECTIVE NO. 6 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

GUNNER TIMES SHOT

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 7 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 8 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:  
TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
\*\*\*\*\*

GUNNER BEHAVIORS:  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN  
\*\*\*\*\*

LOADER BEHAVIORS:  
LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"  
\*\*\*\*\*

DRIVER BEHAVIORS:  
DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES  
\*\*\*\*\*



JOB OBJECTIVE NO. 9 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER SELECTS SABOT OR HEAT RETICLE

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE

GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET

GUNNER TIMES SHOT

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 10    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET  
   GUNNER TIMES SHOT  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 11 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

GUNNER TIMES SHOT

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 12    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: MOVING    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
   GUNNER TIMES SHOT  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 13 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLE SIGHT  
VEHICLE MOTION: MOVING TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLE SIGHT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
GUNNER TIMES SHOT  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 14    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
   GUNNER TIMES SHOT  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 15      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING      TARGET MOTION: STATIONARY      TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1600 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

GUNNER TIMES SHOT

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "Up"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 16 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ANNOUNCES "DRIVER, STOP"

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER SELECTS SABOT OR HEAT RETICLE

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER LAYS RANGELINE AT CENTER OF BASE OF TARGET

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

DRIVER MOVES TO HULL DOWN FIRING POSITION

DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT

DRIVER BRAKES



JOB OBJECTIVE NO. 17 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER SELECTS SABOT OR HEAT RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS RANGELINE AT CENTER OF BASE OF TARGET  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

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JOB OBJECTIVE NO. 18      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1000 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "BATTLESIGHT"
TC ANNOUNCES "RED LIGHT"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER TURNS INFRARED SIGHT ON
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF BASE OF TARGET
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN

*****
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
DRIVER MOVES TO HULL DOWN FIRING POSITION
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
DRIVER BRAKES

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JOB OBJECTIVE NO. 19    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

JOB OBJECTIVE NO. 20 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT  
VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER SELECTS SABOT OR HEAT RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS RANGELINE LEADLINE AT CENTER OF BASE OF TARGET  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 21 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES "REDLIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER TURNS INFRARED SIGHT ON  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES

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JOB OBJECTIVE NO. 22      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: BATTLESIGHT
=====
VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TANK OR LAV
=====
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1600 METERS      DAY/NIGHT: NIGHT
=====
FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: SABOT OR HEAT
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "BATTLESIGHT"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"
=====
*****
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF BASE OF TARGET
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====
*****
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====
*****
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
DRIVER MOVES TO HULL DOWN FIRING POSITION
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
DRIVER BRAKES
=====

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JOB OBJECTIVE NO. 23    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES

JOB OBJECTIVE NO. 24 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER BRAKES

\*\*\*\*\*



JOB OBJECTIVE NO. 25    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

JOB OBJECTIVE NO. 26 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: BATTLE SIGHT  
 VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "BATTLE SIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER SELECTS SABOT OR HEAT RETICLE  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS RANGELINE AT CENTER OF BASE OF TARGET  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
 LOADER UNLOCKS AMMO READY RACK  
 LOADER SELECTS SABOT OR HEAT  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
 DRIVER BRAKES



JOB OBJECTIVE NO. 27    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS RANGELINE AT CENTER OF BASE OF TARGET  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "Up"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

```

JOB OBJECTIVE NO. 28      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: BATTLESIGHT

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1000 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: SABOT OR HEAT

=====

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "BATTLESIGHT"
TC ANNOUNCES "RED LIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

=====

GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER TURNS INFRARED SIGHT ON
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF BASE OF TARGET
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN

=====

LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

=====

DRIVER BEHAVIORS:
DRIVER BRAKES

```



JOB OBJECTIVE NO. 29    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CROSSHAIR AT CENTER OF BASE OF TARGET  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

```

JOB OBJECTIVE NO. 30  CREW MEMBER: GUNNER  WEAPON: MAIN GUN  FIRING MODE: BATTLESIGHT
VEHICLE MOTION: STATIONARY  TARGET MOTION: STATIONARY  TARGET TYPE: TANK OR LAV
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION  TARGET RANGE: <1600  METERS  DAY/NIGHT: NIGHT
FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY  AMMUNITION: SABOT OR HEAT
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "BATTLESIGHT"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF BASE OF TARGET
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====
DRIVER BEHAVIORS:
DRIVER BRAKES
=====

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## Cluster 2

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
31	TC	MG	BS	M	S	TNK/LAV	VAL	N	RFD	SAB/HEAT	<1600
32	TC	MG	BS	M	M	TNK/LAV	VAL	N	RFD	SAB/HEAT	<1600
33	TC	MG	BS	M	S	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	<1600
34	TC	MG	BS	M	M	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	<1600
35	TC	MG	BS	MH	M	TNK/LAV	VAL	N	RFD	SAB/HEAT	<1600
36	TC	MG	BS	MH	M	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	<1600
37	TC	MG	BS	S	M	TNK/LAV	VAL	N	RFD	SAB/HEAT	<1600
38	TC	MG	BS	S	M	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	<1600
39	TC	MG	BS	MH	S	TNK/LAV	VAL	N	RFD	SAB/HEAT	<1600
40	TC	MG	BS	MH	S	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	<1600
41	TC	MG	BS	S	S	TNK/LAV	VAL	N	RFD	SAB/HEAT	<1600
42	TC	MG	BS	S	S	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	<1600

JOB OBJECTIVE NO. 31 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLE SIGHT

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLE SIGHT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE

TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

TC ANNOUNCES "FROM MY POSITION"

TC TIMES SHOT

TC ANNOUNCES "ON THE WAY"

TC FIRES MAIN GUN

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 32    CREW MEMBER: TANK COMMANDER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: MOVING    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC TURNS RANGEFINDER RETICLE SIGHT ON  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
   TC ANNOUNCES "FROM MY POSITION"  
   TC TIMES SHOT  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES MAIN GUN  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 33 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "BATTLESIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC APPLIES LEAD IN DIRECTION OF OWN GUN TRAVERSE
- TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET
- TC ANNOUNCES "FROM MY POSITION"
- TC TIMES SHOT
- TC ANNOUNCES "ON THE WAY"
- TC FIRES MAIN GUN

\*\*\*\*\*

GUNNER BEHAVIORS:

- GUNNER TURNS ON MAIN GUN SWITCH
- GUNNER ANNOUNCES "CANNOT IDENTIFY"

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER UNLOCKS AMMO READY RACK
- LOADER SELECTS SABOT OR HEAT
- LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 34 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

TC ANNOUNCES "FROM MY POSITION"

TC TIMES SHOT

TC ANNOUNCES "ON THE WAY"

TC FIRES MAIN GUN

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED-

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 35 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 36    CREW MEMBER: TANK COMMANDER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET  
   TC ANNOUNCES "FROM MY POSITION"  
   TC MAKES FINAL PRECISE LAY  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES MAIN GUN  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES

JOB OBJECTIVE NO. 37 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

TC ANNOUNCES "FROM MY POSITION"

TC MAKES FINAL PRECISE LAY

TC ANNOUNCES "ON THE WAY"

TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 38 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

TC LAYS CROSSHAIR LEADLINE AT CENTER OF BASE OF TARGET

TC ANNOUNCES "FROM MY POSITION"

TC MAKES FINAL PRECISE LAY

TC ANNOUNCES "ON THE WAY"

TC FIRES MAIN GUN

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 39 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC LAYS CROSSHAIR AT CENTER OF BASE OF TARGET  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 40 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BATTLESIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC LAYS CROSSHAIR AT CENTER OF BASE OF TARGET  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 41 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: BATTLESIGHT

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "BATTLESIGHT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC LAYS CROSSHAIR AT CENTER OF BASE OF TARGET

TC ANNOUNCES "FROM MY POSITION"

TC MAKES FINAL PRECISE LAY

TC ANNOUNCES "ON THE WAY"

TC FIRES MAIN GUN

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 42    CREW MEMBER: TANK COMMANDER    WEAPON: MAIN GUN    FIRING MODE: BATTLESIGHT  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BATTLESIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC LAYS CROSSHAIR AT CENTER OF BASE OF TARGET  
   TC ANNOUNCES "FROM MY POSITION"  
   TC MAKES FINAL PRECISE LAY  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES MAIN GUN  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

# Cluster 3

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
43	GUNNER	MG	P	MH	M	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	5-3200
44	GUNNER	MG	P	MH	M	TNK/LAV	VAL	N	TEL	SAB/HEAT	5-3200
45	GUNNER	MG	P	MH	S	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	5-3200
46	GUNNER	MG	P	MH	S	TNK/LAV	VAL	N	TEL	SAB/HEAT	5-3200
47	GUNNER	MG	P	MH	M	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	5-4400
48	GUNNER	MG	P	MH	M	TNK/LAV	VAL	N	GPD	SAB/HEAT	5-4400
49	GUNNER	MG	P	S	M	TNK/LAV	VAL	N	TEL	SAB/HEAT	5-3200
50	GUNNER	MG	P	S	M	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	5-3200
51	GUNNER	MG	P	MH	S	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	5-4400
52	GUNNER	MG	P	S	S	TNK/LAV	VAL	N	TEL	SAB/HEAT	5-3200
53	GUNNER	MG	P	S	S	TNK/LAV	VIS	D/N	TEL	SAB/HEAT	5-3200
54	GUNNER	MG	P	MH	S	TNK/LAV	VAL	N	GPD	SAB/HEAT	5-4400
55	GUNNER	MG	P	S	M	TNK/LAV	VAL	N	GPD	SAB/HEAT	5-4400
56	GUNNER	MG	P	S	M	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	5-4400
57	GUNNER	MG	P	S	S	TNK/LAV	VAL	N	GPD	SAB/HEAT	5-4400
58	GUNNER	MG	P	S	S	TNK/LAV	VIS	D/N	GPD	SAB/HEAT	5-4400



JOB OBJECTIVE NO. 43 CREW MEMBER: GUNNER  
 WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-3200 METERS DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "SABOT" OR "HEAT"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC RANGES  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:  
 GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER SELECTS SABOT OR HEAT RETICLE  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:  
 LOADER UNLOCKS AMMO READY RACK  
 LOADER SELECTS SABOT OR HEAT  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:  
 DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER MOVES TO HULL DOWN FIRING POSITION  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES

JOB OBJECTIVE NO. 44    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-3200 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "SABOT" OR "HEAT"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



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JOB OBJECTIVE NO. 45      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: PRECISION

VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE      TARGET RANGE: 5-3200 METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "SABOT" OR "HEAT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "DRIVER, STOP"
TC RANGES
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER SELECTS SABOT OR HEAT RETICLE
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN

*****
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
DRIVER MOVES TO HULL DOWN FIRING POSITION
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
DRIVER BRAKES

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JOB OBJECTIVE NO. 46    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-3200 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "SABOT" OR "HEAT"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 47 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "SABOT" OR "HEAT"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC RANGES  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
 LOADER UNLOCKS AMMO READY RACK  
 LOADER SELECTS SABOT OR HEAT  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
 DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER MOVES TO HULL DOWN FIRING POSITION  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES

JOB OBJECTIVE NO. 48    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-4400 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "SABOT" OR "HEAT"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC RANGES  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 49 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-3200 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "SABOT" OR "HEAT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC RANGES  
TC ANNOUNCES RANGE  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER SELECTS SABOT OR HEAT RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 50    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: 5-3200 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "SABOT" OR "HEAT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES



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JOB OBJECTIVE NO. 51      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: PRECISION
VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TANK OR LAV
TARGET VISIBILITY: VISIBLE      TARGET RANGE: 5-4400 METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: SABOT OR HEAT
=====

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "SABOT" OR "HEAT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "DRIVER, STOP"
TC RANGES
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====

GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====

LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====

DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
DRIVER MOVES TO HULL DOWN FIRING POSITION
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
DRIVER BRAKES
=====

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JOB OBJECTIVE NO. 52      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: PRECISION
VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TANK OR LAV
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: 5-3200 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: SABOT OR HEAT
=====

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "SABOT" OR "HEAT"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC RANGES
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"
=====

GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER SELECTS SABOT OR HEAT RETICLE
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====

LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====

DRIVER BEHAVIORS:
DRIVER BRAKES
=====

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JOB OBJECTIVE NO. 53    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: 5-3200 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "SABOT" OR "HEAT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER SELECTS SABOT OR HEAT RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

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AUG OBJECTIVE NO. 54  CREW MEMBER: GUNNER  WEAPON: MAIN GUN  FIRING MODE: PRECISION
VEHICLE MOTION: MOVING TO A HALT  TARGET MOTION: STATIONARY  TARGET TYPE: TANK OR LAV
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION  TARGET RANGE: 5-4400 METERS  DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY  AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "SABOT" OR "HEAT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "DRIVER, STOP"
TC RANGES
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN

*****
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
DRIVER MOVES TO HULL DOWN FIRING POSITION
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
DRIVER BRAKES

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JOB OBJECTIVE NO. 55    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION

VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-4400 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "SABOT" OR "HEAT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC RANGES

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER BRAKES

\*\*\*\*\*

JOB OBJECTIVE NO. 56    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: 5-4400 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "SABOT" OR "HEAT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC RANGES  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES



JOB OBJECTIVE NO. 57 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "SABOT" OR "HEAT"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC RANGES
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

- GUNNER TURNS ON MAIN GUN SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- GUNNER MAKES FINAL PRECISE LAY
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES MAIN GUN

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER UNLOCKS AMMO READY RACK
- LOADER SELECTS SABOT OR HEAT
- LOADER LOADS MAIN GUN
- LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

- DRIVER BRAKES

\*\*\*\*\*

JOB OBJECTIVE NO. 58 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "SABOT" OR "HEAT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC RANGES  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
 GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN  
 LOADER BEHAVIORS:  
 LOADER UNLOCKS AMMO READY RACK  
 LOADER SELECTS SABOT OR HEAT  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:  
 DRIVER BRAKES



# Cluster 4

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
59	TC	MG	P	MH	M	TNK/LAV	VAL	N	RFD	SAB/HEAT	5-4400
60	TC	MG	P	MH	M	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	5-4400
61	TC	MG	P	MH	S	TNK/LAV	VAL	N	RFD	SAB/HEAT	5-4400
62	TC	MG	P	S	M	TNK/LAV	VAL	N	RFD	SAB/HEAT	5-4400
63	TC	MG	P	MH	S	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	5-4400
64	TC	MG	P	S	M	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	5-4400
65	TC	MG	P	S	S	TNK/LAV	VAL	N	RFD	SAB/HEAT	5-4400
66	TC	MG	P	S	S	TNK/LAV	VIS	D/N	RFD	SAB/HEAT	5-4400

JOB OBJECTIVE NO. 59 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "SABOT" OR "HEAT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 60 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "SABOT" OR "HEAT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 61 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-4400 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT  
=====

TANK COMMANDER BEHAVIORS:  
TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "SABOT" OR "HEAT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN  
=====

GUNNER BEHAVIORS:  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"  
=====

LOADER BEHAVIORS:  
LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"  
=====

DRIVER BEHAVIORS:  
DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES  
=====



JOB OBJECTIVE NO. 62    CREW MEMBER: TANK COMMANDER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-4400 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "SABOT" OR "HEAT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC RANGES  
   TC TURNS RANGEFINDER RETICLE SIGHT ON  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC ANNOUNCES "FROM MY POSITION"  
   TC MAKES FINAL PRECISE LAY  
   TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES MAIN GUN  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER LOADS MAIN GUN  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

JOB OBJECTIVE NO. 63    CREW MEMBER: TANK COMMANDER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: 5-4400 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: SABOT OR HEAT  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "SABOT" OR "HEAT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC RANGES  
   TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   TC ANNOUNCES "FROM MY POSITION"  
   TC MAKES FINAL PRECISE LAY  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES MAIN GUN  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS SABOT OR HEAT  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 64 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING

TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY

AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "SABOT" OR "HEAT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC RANGES

TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

TC ANNOUNCES "FROM MY POSITION"

TC MAKES FINAL PRECISE LAY

TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "ON THE WAY"

TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER DRIVER BRAKES

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JOB OBJECTIVE NO. 65      CREW MEMBER: TANK COMMANDER      WEAPON: MAIN GUN      FIRING MODE: PRECISION
VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TANK OR LAV
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: 5-4400 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY      AMMUNITION: SABOT OR HEAT
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "SABOT" OR "HEAT"
TC ANNOUNCES "WHELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC RANGES
TC TURNS RANGEFINDER RETICLE SIGHT ON
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
TC ANNOUNCES "FROM MY POSITION"
TC MAKES FINAL PRECISE LAY
TC ANNOUNCES "ON THE WAY"
TC FIRES MAIN GUN
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER ANNOUNCES "CANNOT IDENTIFY"
=====
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "Up"
=====
DRIVER BEHAVIORS:
DRIVER BRAKES
=====

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JOB OBJECTIVE NO. 66 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "SABOT" OR "HEAT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC RANGES

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC MAKES FINAL PRECISE LAY

TC ANNOUNCES "ON THE WAY"

TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES

# Cluster 5

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
67	GUNNER	MG	P	MH	M	TSV	VIS	D/N	TEL	HEP	5-1600
68	GUNNER	MG	P	MH	M	TSV	VAL	N	TEL	HEP	5-1600
69	GUNNER	MG	P	MH	S	BKR/CREW	VAL	N	TEL	HEP	5-3200
70	GUNNER	MG	P	MH	S	BKR/CREW	VIS	D/N	TEL	HEP	5-3200
71	GUNNER	MG	P	MH	S	BKR/CREW	VIS	D/N	GPD	HEP	5-4400
72	GUNNER	MG	P	MH	S	BKR/CREW	VAL	N	GPD	HEP	5-4400
73	GUNNER	MG	P	MH	M	TSV	VAL	N	GPD	HEP	5-1600
74	GUNNER	MG	P	MH	M	TSV	VIS	D/N	GPD	HEP	5-1600
75	GUNNER	MG	P	S	S	BKR/CREW	VIS	D/N	TEL	HEP	5-3200
76	GUNNER	MG	P	MH	S	TROOPS	VIS	D/N	TEL	BEEHIVE	5-1200
77	GUNNER	MG	P	MH	S	TROOPS	VAL	N	TEL	BEEHIVE	5-1200
78	GUNNER	MG	P	S	M	TSV	VIS	D/N	TEL	HEP	5-1600
79	GUNNER	MG	P	S	S	BKR/CREW	VIS	D/N	GPD	HEP	5-4400
80	GUNNER	MG	P	S	M	TSV	VIS	D/N	GPD	HEP	5-1600
81	GUNNER	MG	P	MH	S	TROOPS	VAL	N	GPD	BEEHIVE	5-4400
82	GUNNER	MG	P	MH	S	TROOPS	VIS	D/N	GPD	BEEHIVE	5-4400
83	GUNNER	MG	P	S	S	TROOPS	VIS	D/N	TEL	BEEHIVE	5-1200
84	GUNNER	MG	P	S	S	TROOPS	VIS	D/N	GPD	BEEHIVE	5-4400
85	GUNNER	MG	P	S	M	TSV	VAL	N	TEL	HEP	5-1600
86	GUNNER	MG	P	S	S	BKR/CREW	VAL	N	TEL	HEP	5-3200
87	GUNNER	MG	P	S	S	BKR/CREW	VAL	N	GPD	HEP	5-4400
88	GUNNER	MG	P	S	S	TROOPS	VAL	N	TEL	BEEHIVE	5-1200
89	GUNNER	MG	P	S	M	TSV	VAL	N	GPD	HEP	5-1600
90	GUNNER	MG	P	S	S	TROOPS	VAL	N	GPD	BEEHIVE	5-4400



JOB OBJECTIVE NO. 67 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE

AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC ANNOUNCES RANGE  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER SELECTS HEP RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "HEP, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 68 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "HEP"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC RANGES  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER INDEXES HEP  
 GUNNER SELECTS HEP RETICLE  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
 LOADER UNLOADS MAIN GUN  
 LOADER SELECTS HEP  
 LOADER LOADS MAIN GUN  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "HEP, UP"  
 LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER MOVES TO HULL DOWN FIRING POSITION  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES



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JOB OBJECTIVE NO. 69      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: PRECISION

VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: BUNKER OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: 5-3200 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "HEP"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "DRIVER, STOP"
TC RANGES
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER INDEXES HEP
GUNNER SELECTS HEP RETICLE
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER UNLOADS MAIN GUN
LOADER SELECTS HEP
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "HEP, UP"
LOADER STOWS ROUND

DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
DRIVER MOVES TO HULL DOWN FIRING POSITION
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
DRIVER BRAKES

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JOB OBJECTIVE NO. 70 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-3200 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC ANNOUNCES RANGE  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER SELECTS HEP RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "HEP, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 71 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "HEP"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ANNOUNCES "DRIVER, STOP"

TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER INDEXES HEP

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

GUNNER APPLIES AIM-OFF (RANGE >1600 METERS)

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

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LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER UNLOADS MAIN GUN

LOADER SELECTS HEP

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "HEP, UP"

LOADER STOWS ROUND

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DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

DRIVER MOVES TO HULL DOWN FIRING POSITION

DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT

DRIVER BRAKES

JOB OBJECTIVE NO. 72    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: BUNKER OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-4400 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: HEP  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "HEP"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER INDEXES HEP  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   GUNNER APPLIES AIM-OFF (RANGE >1600 METERS)  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER UNLOADS MAIN GUN  
   LOADER SELECTS HEP  
   LOADER LOADS MAIN GUN  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "HEP, UP"  
   LOADER STOWS ROUND  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY R.I. JF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 73 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "HEP"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER INDEXES HEP  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
 LOADER UNLOADS MAIN GUN  
 LOADER SELECTS HEP  
 LOADER LOADS MAIN GUN  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "HEP, UP"  
 LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER MOVES TO HULL DOWN FIRING POSITION  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES

JOB OBJECTIVE NO. 74 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "HEP"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC RANGES  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*

GUNNER BEHAVIORS:  
 GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER INDEXES HEP  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN  
 \*\*\*\*\*

LOADER BEHAVIORS:  
 LOADER UNLOCKS AMMO READY RACK  
 LOADER UNLOADS MAIN GUN  
 LOADER SELECTS HEP  
 LOADER LOADS MAIN GUN  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "HEP, UP"  
 LOADER STOWS ROUND  
 \*\*\*\*\*

DRIVER BEHAVIORS:  
 DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER MOVES TO HULL DOWN FIRING POSITION  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES  
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JOB OBJECTIVE NO. 75    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION

VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: BUNKER OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE    TARGET RANGE: 5-3200 METERS    DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "HEP"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC RANGES
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
=====
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER INDEXES HEP
GUNNER SELECTS HEP RETICLE
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER UNLOADS MAIN GUN
LOADER SELECTS HEP
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "HEP, UP"
LOADER STOWS ROUND
=====
DRIVER BEHAVIORS:
DRIVER BRAKES
=====

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JOB OBJECTIVE NO. 76 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-1200 METERS DAY/NIGHT: DAY OR NIGHT  
 AMMUNITION: BEEHIVE

FIRE CONTROL INSTRUMENT: TELESCOPE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "BEEHIVE TIME"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER INDEXES APERS  
 GUNNER SELECTS HEP RETICLE  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
 LOADER UNLOADS MAIN GUN  
 LOADER SELECTS BEEHIVE  
 LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
 LOADER LOADS MAIN GUN  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "BEEHIVE, UP"  
 LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER MOVES TO HULL DOWN FIRING POSITION  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES



JOB OBJECTIVE NO. 77    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-1200 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: BEEHIVE  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "BEEHIVE TIME"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER INDEXES APERS  
   GUNNER SELECTS HEP RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER UNLOADS MAIN GUN  
   LOADER SELECTS BEEHIVE  
   LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
   LOADER LOADS MAIN GUN  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "BEEHIVE, UP"  
   LOADER STOWS ROUND  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES

JOB OBJECTIVE NO. 76 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "HEP"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC RANGES  
 TC ANNOUNCES RANGE

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER INDEXES HEP  
 GUNNER SELECTS HEP RETICLE  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
 LOADER UNLOADS MAIN GUN  
 LOADER SELECTS HEP  
 LOADER LOADS MAIN GUN  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "HEP, UP"  
 LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 79 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "HEP"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC RANGES
- TC ANNOUNCES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

- GUNNER TURNS ON MAIN GUN SWITCH
- GUNNER INDEXES HEP
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- GUNNER APPLIES AIM-OFF (RANGE >1600 METERS)
- GUNNER MAKES FINAL PRECISE LAY
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

- LOADER UNLOCKS AMMO READY RACK
- LOADER UNLOADS MAIN GUN
- LOADER SELECTS HEP
- LOADER LOADS MAIN GUN
- LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "HEP, UP"
- LOADER STOWS ROUND

DRIVER BEHAVIORS:

- DRIVER BRAKES

JOB OBJECTIVE NO. 80    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: 5-1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: HEP  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "HEP"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER INDEXES HEP  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER UNLOADS MAIN GUN  
   LOADER SELECTS HEP  
   LOADER LOADS MAIN GUN  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "HEP, UP"  
   LOADER STOWS ROUND  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES



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JOB OBJECTIVE NO. 81      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: PRECISION

VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: 5-4400 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: BEEHIVE

=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "BEEHIVE TIME"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "DRIVER, STOP"
TC RANGES
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER INDEXES APERS
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER UNLOADS MAIN GUN
LOADER SELECTS BEEHIVE
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "BEEHIVE, UP"
LOADER STOWS ROUND
=====
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
DRIVER MOVES TO HULL DOWN FIRING POSITION
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
DRIVER BRAKES
=====

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JOB OBJECTIVE NO. 82 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BEEHIVE TIME"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES APERS  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS BEEHIVE  
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "BEEHIVE, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 83 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-1200 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BEEHIVE TIME"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES APERS  
GUNNER SELECTS HEP RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS BEEHIVE  
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "BEEHIVE, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 84 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BEEHIVE TIME"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC RANGES  
TC ANNOUNCES RANGE  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES APERS  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS BEEHIVE  
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "BEEHIVE, UP"  
LOADER STONS ROUND

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 85    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: HEP  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "HEP"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER INDEXES HEP  
   GUNNER SELECTS HEP RETICLE  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS HEP  
   LOADER LOADS MAIN GUN  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

JOB OBJECTIVE NO. 86 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-3200 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC RANGES  
TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER SELECTS HEP RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 87 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "HEP"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER INDEXES HEP

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

GUNNER APPLIES AIM-OFF (RANGE >1600 METERS)

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS HEP

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 88 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-1200 METERS DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "BEEHIVE TIME"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC RANGES  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER INDEXES APERS  
 GUNNER SELECTS HEP RETICLE  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER MAKES FINAL PRECISE LAY  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
 LOADER SELECTS BEEHIVE  
 LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
 LOADER LOADS MAIN GUN  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES



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JOB OBJECTIVE NO. 89  CREW MEMBER: GUNNER  WEAPON: MAIN GUN  FIRING MODE: PRECISION

VEHICLE MOTION: STATIONARY  TARGET MOTION: MOVING  TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION  TARGET RANGE: 5-1600 METERS  DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY  AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:
=====
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "HEP"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC RANGES
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
=====
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER INDEXES HEP
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====
LOADER BEHAVIORS:
=====
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS HEP
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====
DRIVER BEHAVIORS:
=====
DRIVER BRAKES
=====

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JOB OBJECTIVE NO. 90      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: PRECISION
VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: 5-4400 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "BEEHIVE TIME"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC RANGES
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER INDEXES APERS
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN

*****
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS BEEHIVE
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:
DRIVER BRAKES

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# Cluster 6

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANCH
91	TC	MG	P	MH	S	BKR/CREW	VAL	N	RFD	HEP	5-4400
92	TC	MG	P	MH	S	BKR/CREW	VIS	D/N	RFD	HEP	5-4400
93	TC	MG	P	S	S	BKR/CREW	VIS	D/N	RFD	HEP	5-4400
94	TC	MG	P	MH	M	TSV	VAL	N	RFD	HEP	5-1600
95	TC	MG	P	MH	S	TROOPS	VAL	N	RFD	BEEHIVE	5-4400
96	TC	MG	P	MH	M	TSV	VIS	D/N	RFD	HEP	5-1600
97	TC	MG	P	S	M	TSV	VIS	D/N	RFD	HEP	5-1600
98	TC	MG	P	MH	S	TROOPS	VIS	D/N	RFD	BEEHIVE	5-4400
99	TC	MG	P	S	S	TROOPS	VIS	D/N	RFD	BEEHIVE	5-4400
100	TC	MG	P	S	S	BKR/CREW	VAL	N	RFD	HEP	5-4400
101	TC	MG	P	S	M	TSV	VAL	N	RFD	HEP	5-1600
102	TC	MG	P	S	S	TROOPS	VAL	N	RFD	BEEHIVE	5-4400

JOB OBJECTIVE NO. 91 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY

AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC ANNOUNCES RANGE  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC APPLIES AIM-OFF (RANGE >1600 METERS)  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER SELECTS HEP RETICLE  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "HEP, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



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JOB OBJECTIVE NO. 92  CREW MEMBER: TANK COMMANDER  WEAPON: MAIN GUN  FIRING MODE: PRECISION

VEHICLE MOTION: MOVING TO A HALT  TARGET MOTION: STATIONARY  TARGET TYPE: BUNKER OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE  TARGET RANGE: 5-4400 METERS  DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY  AMMUNITION: HEP
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "HEP"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ANNOUNCES "DRIVER, STOP"
TC RANGES
TC ANNOUNCES RANGE
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
TC APPLIES AIM-OFF (RANGE >1600 METERS)
TC ANNOUNCES "FROM MY POSITION"
TC MAKES FINAL PRECISE LAY
TC ANNOUNCES "ON THE WAY"
TC FIRES MAIN GUN
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER INDEXES HEP
GUNNER SELECTS HEP RETICLE
GUNNER ANNOUNCES "CANNOT IDENTIFY"
=====
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER UNLOADS MAIN GUN
LOADER SELECTS HEP
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "HEP, Up"
LOADER STOWS ROUND
=====
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
DRIVER MOVES TO HULL DOWN FIRING POSITION
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
DRIVER BRAKES
=====

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JOB OBJECTIVE NO. 93 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:  
TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC RANGES  
TC ANNOUNCES RANGE  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC APPLIES AIM-OFF (RANGE >1600 METERS)  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER SELECTS HEP RETICLE  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:  
LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "HEP, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:  
DRIVER BRAKES



JOB OBJECTIVE NO. 94 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITIONS: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC ANNOUNCES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "HEP, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 95 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BEEHIVE TIME"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC ANNOUNCES RANGE  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES APERS  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS BEEHIVE  
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "BEEHIVE, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 96 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"

TC RANGES

TC ANNOUNCES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "HEP, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 97 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC RANGES  
TC ANNOUNCES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "HEP, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 98 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY

AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "BEEHIVE TIME"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC RANGES  
TC ANNOUNCES RANGE  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES APERS  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER UNLOADS MAIN GUN  
LOADER SELECTS BEEHIVE  
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "BEEHIVE, UP"  
LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 99 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
 VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: 5-4400 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "BEEHIVE TIME"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC RANGES  
 TC ANNOUNCES RANGE  
 TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
 TC ANNOUNCES "FROM MY POSITION"  
 TC MAKES FINAL PRECISE LAY  
 TC ANNOUNCES "ON THE WAY"  
 TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
 GUNNER INDEXES APERS  
 GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
 LOADER UNLOADS MAIN GUN  
 LOADER SELECTS BEEHIVE  
 LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
 LOADER LOADS MAIN GUN  
 LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "BEEHIVE, UP"  
 LOADER STOWS ROUND

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 100 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC ANNOUNCES RANGE  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC APPLIES AIM-OFF (RANGE >1600 METERS)  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER SELECTS HEP RETICLE  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 101 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 5-1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC ANNOUNCES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER INDEXES HEP  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 102    CREW MEMBER: TANK COMMANDER    WEAPON: MAIN GUN    FIRING MODE: PRECISION

VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: 5-4400 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "BEEHIVE TIME"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC RANGES
- TC TURNS RANGEFINDER RETICLE SIGHT ON
- TC ANNOUNCES RANGE
- TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- TC ANNOUNCES "FROM MY POSITION"
- TC MAKES FINAL PRECISE LAY
- TC ANNOUNCES "ON THE WAY"
- TC FIRES MAIN GUN

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GUNNER BEHAVIORS:

- GUNNER TURNS ON MAIN GUN SWITCH
- GUNNER INDEXES APERS
- GUNNER ANNOUNCES "CANNOT IDENTIFY"

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LOADER BEHAVIORS:

- LOADER UNLOCKS AMMO READY RACK
- LOADER SELECTS BEEHIVE
- LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE
- LOADER LOADS MAIN GUN
- LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

- DRIVER BRAKES

# Cluster 7

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
103	GUNNER	MG	RCLD	S	S	TROOPS	VAL	N	GPI	BEEHIVE	<1000
104	GUNNER	MG	RCLD	S	S	TROOPS	VAL	N	GPD	BEEHIVE	<4400
105	GUNNER	MG	RCLD	S	S	TROOPS	VAL	N	TEL	BEEHIVE	<3200
106	GUNNER	MG	RCLD	S	M	TSV/CREW	VAL	N	GPI	HEP	<1000
107	GUNNER	MG	RCLD	S	S	BKR/CREW	VAL	N	GPI	HEP	<1000
108	GUNNER	MG	RCLD	S	S	BKR/CREW	VAL	N	GPD	HEP	<4400
109	GUNNER	MG	RCLD	S	M	TSV/CREW	VAL	N	GPD	HEP	<1600
110	GUNNER	MG	RCLD	S	S	BKR/CREW	VAL	N	TEL	HEP	<3200
111	GUNNER	MG	RCLD	S	M	TSV/CREW	VAL	N	TEL	HEP	<1600
112	GUNNER	MG	RC	S	S	ALL	NVIS	D/N	AUX	HEP	<4400



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JOB OBJECTIVE NO. 103      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1000 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: BEEHIVE

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TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER, DIRECT FIRE"
TC ANNOUNCES "RED LIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC ANNOUNCES "INDEX HEP, FIRE BEEHIVE" OR "BEEHIVE, TIME"
TC INDEXES RANGE INTO RANGEFINDER
TC ANNOUNCES RANGE
TC ANNOUNCES DEFLECTION
TC VERIFYS DEFLECTION READBACK
TC ANNOUNCES QUADRANT ELEVATION
TC VERIFYS QUADRANT ELEVATION READBACK
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:
GUNNER TURNS ON TURRET POWER
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER TURNS INFRARED SIGHT ON
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
GUNNER READS BACK DEFLECTION
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
GUNNER READS BACK QUADRANT ELEVATION
GUNNER LEVELS BUBBLE
GUNNER REINDEXES BEEHIVE
GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN

=====

LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS BEEHIVE
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 104    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <4400 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: BEEHIVE  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER, DIRECT FIRE"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC ANNOUNCES "INDEX HEP, FIRE BEEHIVE" OR "BEEHIVE, TIME"  
   TC INDEXES RANGE INTO RANGEFINDER  
   TC RANGES  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES DEFLECTION  
   TC VERIFYS DEFLECTION READBACK  
   TC ANNOUNCES QUADRANT ELEVATION  
   TC VERIFYS QUADRANT ELEVATION READBACK  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON TURRET POWER  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
   GUNNER READS BACK DEFLECTION  
   GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
   GUNNER READS BACK QUADRANT ELEVATION  
   GUNNER LEVELS BUBBLE  
   GUNNER REINDEXES BEEHIVE  
   GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"  
   GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   GUNNER MAKES FINAL PRECISE LAY  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES MAIN GUN  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS BEEHIVE  
   LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
   LOADER LOADS MAIN GUN  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 105 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <3200 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC ANNOUNCES "INDEX HEP, FIRE BEEHIVE" OR "BEEHIVE, TIME"

TC INDEXES RANGE INTO RANGEFINDER

TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER REINDEXES BEEHIVE

GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"

GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS BEEHIVE

LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 106      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE
VEHICLE MOTION: STATIONARY      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREMSERVED WEAPON
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1000 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: HEP
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER, DIRECT FIRE"
TC ANNOUNCES "HEP"
TC ANNOUNCES "RED LIGHT"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC INDEXES RANGE INTO RANGEFINDER
TC ANNOUNCES RANGE
TC ANNOUNCES DEFLECTION
TC VERIFYS DEFLECTION READBACK
TC ANNOUNCES QUADRANT ELEVATION
TC VERIFYS QUADRANT ELEVATION READBACK
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
*****
GUNNER BEHAVIORS:
GUNNER TURNS ON TURRET POWER
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER TURNS INFRARED SIGHT ON
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
GUNNER READS BACK DEFLECTION
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
GUNNER READS BACK QUADRANT ELEVATION
GUNNER LEVELS BUBBLE
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
*****
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS HEP
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
*****
DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 107      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: BUNKER OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1000 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER, DIRECT FIRE"
- TC ANNOUNCES "HEP"
- TC ANNOUNCES "RED LIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC INDEXES RANGE INTO RANGEFINDER
- TC ANNOUNCES RANGE
- TC ANNOUNCES DEFLECTION
- TC VERIFYS DEFLECTION READBACK
- TC ANNOUNCES QUADRANT ELEVATION
- TC VERIFYS QUADRANT ELEVATION READBACK
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:

- GUNNER TURNS ON TURRET POWER
- GUNNER TURNS ON MAIN GUN SWITCH
- GUNNER TURNS INFRARED SIGHT ON
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
- GUNNER READS BACK DEFLECTION
- GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- GUNNER READS BACK QUADRANT ELEVATION
- GUNNER LEVELS BUBBLE
- GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- GUNNER MAKES FINAL PRECISE LAY
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES MAIN GUN

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LOADER BEHAVIORS:

- LOADER UNLOCKS AMMO READY RACK
- LOADER SELECTS HEP
- LOADER LOADS MAIN GUN
- LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 108 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "HEP"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

GUNNER APPLIES AIM-OFF (RANGE >1600 METERS)

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS HEP

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



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JOB OBJECTIVE NO. 109      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE
VEHICLE MOTION: STATIONARY      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1600 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: HEP
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER, DIRECT FIRE"
TC ANNOUNCES "HEP"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC INDEXES RANGE INTO RANGEFINDER
TC RANGES
TC ANNOUNCES RANGE
TC ANNOUNCES DEFLECTION
TC VERIFYS DEFLECTION READBACK
TC ANNOUNCES QUADRANT ELEVATION
TC VERIFYS QUADRANT ELEVATION READBACK
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON TURRET POWER
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
GUNNER READS BACK DEFLECTION
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
GUNNER READS BACK QUADRANT ELEVATION
GUNNER LEVELS BUBBLE
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS HEP
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "Up"
=====
DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 110      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: BUNKER OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <3200 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "HEP"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER SELECTS HEP RETICLE

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

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LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS HEP

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 111 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER, DIRECT FIRE"
- TC ANNOUNCES "HEP"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC INDEXES RANGE INTO RANGEFINDER
- TC ANNOUNCES RANGE
- TC ANNOUNCES DEFLECTION
- TC VERIFYS DEFLECTION READBACK
- TC ANNOUNCES QUADRANT ELEVATION
- TC VERIFYS QUADRANT ELEVATION READBACK
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

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GUNNER BEHAVIORS:

- GUNNER TURNS ON TURRET POWER
- GUNNER TURNS ON MAIN GUN SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
- GUNNER READS BACK DEFLECTION
- GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- GUNNER READS BACK QUADRANT ELEVATION
- GUNNER LEVELS BUBBLE
- GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY
- GUNNER MAKES FINAL PRECISE LAY
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES MAIN GUN

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LOADER BEHAVIORS:

- LOADER UNLOCKS AMMO READY RACK
- LOADER SELECTS HEP
- LOADER LOADS MAIN GUN
- LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 112      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: RANGE CARD  
VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: ALL TARGETS  
TARGET VISIBILITY: NOT VISIBLE      TARGET RANGE: <400 METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: AUXILIARY FIRE CONTROLS      AMMUNITION: HEP

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "AREA FIRE" OR "ONE, TWO...ROUNDS, HEP"  
TC ANNOUNCES TARGET DESCRIPTION  
TC INDEXES RANGE INTO RANGEFINDER  
TC ANNOUNCES RANGE  
TC ANNOUNCES DEFLECTION  
TC VERIFYS DEFLECTION READBACK  
TC ANNOUNCES QUADRANT ELEVATION  
TC VERIFYS QUADRANT ELEVATION READBACK  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
GUNNER READS BACK DEFLECTION  
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
GUNNER READS BACK QUADRANT ELEVATION  
GUNNER LEVELS BUBBLE  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



# Cluster 8

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
113	GUNNER	MG	RCLD	S	M	TNK/LAV	VAL	N	TEL	SAB/HEAT	<4400
114	GUNNER	MG	RCLD	S	M	TNK/LAV	VAL	N	GP I	SAB/HEAT	<1000
115	GUNNER	MG	RCLD	S	M	TNK/LAV	VAL	N	GP D	SAB/HEAT	<4400
116	GUNNER	MG	RCLD	S	S	TNK/LAV	VAL	N	TEL	SAB/HEAT	<4400
117	GUNNER	MG	RCLD	S	S	TNK/LAV	VAL	N	GP I	SAB/HEAT	<1000
118	GUNNER	MG	RCLD	S	S	TNK/LAV	VAL	N	GP D	SAB/HEAT	<4400

JOB OBJECTIVE NO. 113 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE  
VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <4400 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"  
TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC INDEXES RANGE INTO RANGEFINDER  
TC RANGES  
TC ANNOUNCES RANGE  
TC ANNOUNCES DEFLECTION  
TC VERIFYS DEFLECTION READBACK  
TC ANNOUNCES QUADRANT ELEVATION  
TC VERIFYS QUADRANT ELEVATION READBACK  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER SELECTS SABOT OR HEAT RETICLE  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
GUNNER READS BACK DEFLECTION  
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
GUNNER READS BACK QUADRANT ELEVATION  
GUNNER LEVELS BUBBLE  
GUNNER REINDEXES SABOT OR HEAT  
GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 114 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"  
TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"  
TC ANNOUNCES "RED LIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC INDEXES RANGE INTO RANGEFINDER  
TC ANNOUNCES RANGE  
TC ANNOUNCES DEFLECTION  
TC VERIFYS DEFLECTION READBACK  
TC ANNOUNCES QUADRANT ELEVATION  
TC VERIFYS QUADRANT ELEVATION READBACK  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER TURNS INFRARED SIGHT ON  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
GUNNER READS BACK DEFLECTION  
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
GUNNER READS BACK QUADRANT ELEVATION  
GUNNER LEVELS BUBBLE  
GUNNER REINDEXES SABOT OR HEAT  
GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
GUNNER MAKES FINAL PRECISE LAY  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 115      CREW MEMBER: GUNNER      WEAPON: MAIN GUN      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY      TARGET MOTION: MOVING      TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <4400 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER REINDEXES SABOT OR HEAT

GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"

GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 116 CREW MEMBER: GUNNER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"  
TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER SELECTS SABOT OR HEAT RETICLE

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER REINDEXES SABOT OR HEAT

GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"

GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 117    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE
=====
VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV
=====
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1000 METERS    DAY/NIGHT: NIGHT
=====
FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED    AMMUNITION: SABOT OR HEAT
=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER, DIRECT FIRE"
TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"
TC ANNOUNCES "RED LIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC INDEXES RANGE INTO RANGEFINDER
TC ANNOUNCES RANGE
TC ANNOUNCES DEFLECTION
TC VERIFYS DEFLECTION READBACK
TC ANNOUNCES QUADRANT ELEVATION
TC VERIFYS QUADRANT ELEVATION READBACK
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON TURRET POWER
GUNNER TURNS ON MAIN GUN SWITCH
GUNNER TURNS INFRARED SIGHT ON
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
GUNNER READS BACK DEFLECTION
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
GUNNER READS BACK QUADRANT ELEVATION
GUNNER LEVELS BUBBLE
GUNNER REINDEXES SABOT OR HEAT
GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER MAKES FINAL PRECISE LAY
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES MAIN GUN
=====
LOADER BEHAVIORS:
LOADER UNLOCKS AMMO READY RACK
LOADER SELECTS SABOT OR HEAT
LOADER LOADS MAIN GUN
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION
LOADER ANNOUNCES "Up"
=====
DRIVER BEHAVIORS:
=====

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JOB OBJECTIVE NO. 118    CREW MEMBER: GUNNER    WEAPON: MAIN GUN    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <4400 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC RANGES

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

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GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER REINDEXES SABOT OR HEAT

GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"

GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

GUNNER MAKES FINAL PRECISE LAY

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES MAIN GUN

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LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

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# Cluster 9

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
119	TC	MG	RCLD	S	N	TNK/LAV	VAL	N	RFD	SAB/HEAT	<4400
120	TC	MG	RCLD	S	S	TNK/LAV	VAL	N	RFD	SAB/HEAT	<4400



JOB OBJECTIVE NO. 119 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"  
TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC INDEXES RANGE INTO RANGEFINDER  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC ANNOUNCES RANGE  
TC ANNOUNCES DEFLECTION  
TC VERIFYS DEFLECTION READBACK  
TC ANNOUNCES QUADRANT ELEVATION  
TC VERIFYS QUADRANT ELEVATION READBACK  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"  
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
GUNNER READS BACK DEFLECTION  
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
GUNNER READS BACK QUADRANT ELEVATION  
GUNNER LEVELS BUBBLE  
GUNNER REINDEXES SABOT OR HEAT  
GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS SABOT OR HEAT  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 120 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TANK OR LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: SABOT OR HEAT

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "INDEX HEP, FIRE SABOT" OR "INDEX HEP, FIRE HEAT"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC RANGES

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC VERIFYS QUADRANT ELEVATION READBACK

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC MAKES FINAL PRECISE LAY

TC ANNOUNCES "ON THE WAY"

TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON MAIN GUN SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER REINDEXES SABOT OR HEAT

GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK

LOADER SELECTS SABOT OR HEAT

LOADER LOADS MAIN GUN

LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



# Cluster 10

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
121	TC	MG	RCLD	S	S	TROOPS	VAL	N	RFD	BEEHIVE	<4400
122	TC	MG	RCLD	S	S	BKR/CREW	VAL	N	RFD	HEP	<4400
123	TC	MG	RCLD	S	M	TSV/CREW	VAL	N	RFD	HEP	<1600

JOB OBJECTIVE NO. 121 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: BEEHIVE

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC ANNOUNCES "INDEX HEP, FIRE BEEHIVE" OR "BEEHIVE, TIME"  
TC INDEXES RANGE INTO RANGEFINDER  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC ANNOUNCES RANGE  
TC ANNOUNCES DEFLECTION  
TC VERIFYS DEFLECTION READBACK  
TC ANNOUNCES QUADRANT ELEVATION  
TC VERIFYS QUADRANT ELEVATION READBACK  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"  
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
GUNNER READS BACK DEFLECTION  
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
GUNNER READS BACK QUADRANT ELEVATION  
GUNNER LEVELS BUBBLE  
GUNNER REINDEXES BEEHIVE  
GUNNER ANNOUNCES "SABOT INDEXED" OR "HEAT INDEXED" OR "BEEHIVE INDEXED"

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS BEEHIVE  
LOADER SETS BEEHIVE FUZE SETTING TO ANNOUNCED RANGE  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 122 CREW MEMBER: TANK COMMANDER WEAPON: MAIN GUN FIRING MODE: RANGE CARD LAY TO DIRECT FIRE  
VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: BUNKER OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <4400 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: HEP  
TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"  
TC ANNOUNCES "HEP"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC INDEXES RANGE INTO RANGEFINDER  
TC RANGES  
TC TURNS RANGEFINDER RETICLE SIGHT ON  
TC ANNOUNCES RANGE  
TC ANNOUNCES DEFLECTION  
TC VERIFYS DEFLECTION READBACK  
TC ANNOUNCES QUADRANT ELEVATION  
TC VERIFYS QUADRANT ELEVATION READBACK  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC APPLIES AIM-OFF (RANGE >1600 METERS)  
TC ANNOUNCES "FROM MY POSITION"  
TC MAKES FINAL PRECISE LAY  
TC ANNOUNCES "ON THE WAY"  
TC FIRES MAIN GUN

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER  
GUNNER TURNS ON MAIN GUN SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"  
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
GUNNER READS BACK DEFLECTION  
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
GUNNER READS BACK QUADRANT ELEVATION  
GUNNER LEVELS BUBBLE

LOADER BEHAVIORS:

LOADER UNLOCKS AMMO READY RACK  
LOADER SELECTS HEP  
LOADER LOADS MAIN GUN  
LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 123    CREW MEMBER: TANK COMMANDER    WEAPON: MAIN GUN    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: HEP  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER, DIRECT FIRE"  
   TC ANNOUNCES "HEP"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC INDEXES RANGE INTO RANGEFINDER  
   TC RANGES  
   TC TURNS RANGEFINDER RETICLE SIGHT ON  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES DEFLECTION  
   TC VERIFYS DEFLECTION READBACK  
   TC ANNOUNCES QUADRANT ELEVATION  
   TC VERIFYS QUADRANT ELEVATION READBACK  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC ANNOUNCES "FROM MY POSITION"  
   TC MAKES FINAL PRECISE LAY  
   TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES MAIN GUN  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON TURRET POWER  
   GUNNER TURNS ON MAIN GUN SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
   GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
   GUNNER READS BACK DEFLECTION  
   GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
   GUNNER READS BACK QUADRANT ELEVATION  
   GUNNER LEVELS BUBBLE  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER UNLOCKS AMMO READY RACK  
   LOADER SELECTS HEP  
   LOADER LOADS MAIN GUN  
   LOADER PLACES MAIN GUN SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:



# Cluster 11

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
124	GUNNER	COAX	NP	HH	M	TSV/CREW	VAL	N	GPI	COAX	<900
125	GUNNER	COAX	NP	HH	M	TSV/CREW	VIS	D/N	INF	COAX	<900
126	GUNNER	COAX	NP	HH	M	TSV/CREW	VAL	N	INF	COAX	<900
127	GUNNER	COAX	NP	HH	M	TSV/CREW	VAL	N	GPD	COAX	<900
128	GUNNER	COAX	NP	HH	M	TSV/CREW	VAL	N	TEL	COAX	<900
129	GUNNER	COAX	NP	M	M	TSV/CREW	VAL	N	GPI	COAX	<900
130	GUNNER	COAX	NP	HH	S	TSV	VAL	N	GPI	COAX	<900
131	GUNNER	COAX	NP	M	M	TSV/CREW	VIS	D/N	INF	COAX	<900
132	GUNNER	COAX	NP	M	M	TSV/CREW	VAL	N	INF	COAX	<900
133	GUNNER	COAX	NP	HH	S	TSV	VAL	N	INF	COAX	<900
134	GUNNER	COAX	NP	M	M	TSV/CREW	VIS	D/N	GPD	COAX	<900
135	GUNNER	COAX	NP	M	M	TSV/CREW	VAL	N	GPD	COAX	<900
136	GUNNER	COAX	NP	M	M	TSV/CREW	VAL	N	TEL	COAX	<900
137	GUNNER	COAX	NP	M	M	TSV/CREW	VIS	D/N	TEL	COAX	<900
138	GUNNER	COAX	NP	HH	S	TSV	VIS	D/N	GPD	COAX	<900
139	GUNNER	COAX	NP	HH	S	TSV	VAL	N	GPD	COAX	<900
140	GUNNER	COAX	NP	HH	S	TSV	VIS	D/N	TEL	COAX	<900
141	GUNNER	COAX	NP	HH	S	TSV	VAL	N	TEL	COAX	<900
142	GUNNER	COAX	NP	M	S	TSV	VAL	N	GPI	COAX	<900
143	GUNNER	COAX	NP	M	S	TSV	VAL	N	INF	COAX	<900
144	GUNNER	COAX	NP	M	S	TSV	VIS	D/N	INF	COAX	<900
145	GUNNER	COAX	NP	M	S	TSV	VAL	N	GPD	COAX	<900
146	GUNNER	COAX	NP	M	S	TSV	VIS	D/N	GPD	COAX	<900
147	GUNNER	COAX	NP	HH	M	TSV/CREW	VIS	D/N	GPD	COAX	<900
148	GUNNER	COAX	NP	HH	M	TSV/CREW	VIS	D/N	TEL	COAX	<900
149	GUNNER	COAX	NP	M	S	TSV	VIS	D/N	TEL	COAX	<900
150	GUNNER	COAX	NP	M	S	TSV	VAL	N	TEL	COAX	<900
151	GUNNER	COAX	NP	HH	S	TSV	VIS	D/N	INF	COAX	<900
152	GUNNER	COAX	NP	S	M	TSV/CREW	VAL	N	GPI	COAX	<900
153	GUNNER	COAX	NP	S	M	TSV/CREW	VAL	N	INF	COAX	<900
154	GUNNER	COAX	NP	S	M	TSV/CREW	VIS	D/N	INF	COAX	<900
155	GUNNER	COAX	NP	S	M	TSV/CREW	VIS	D/N	GPD	COAX	<900

# Cluster 11

(continued)

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	DAY OR NIGHT	TARGET VISIBILITY	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
156	GUNNER	COAX	NP	S	M	TSV/CREW	VAL	N	GPD	COAX	<900
157	GUNNER	COAX	NP	S	M	TSV/CREW	VIS	D/N	TEL	COAX	<900
158	GUNNER	COAX	NP	S	M	TSV/CREW	VAL	N	TEL	COAX	<900
159	GUNNER	COAX	NP	S	S	TSV	VAL	N	GPI	COAX	<900
160	GUNNER	COAX	NP	S	S	TSV	VAL	N	INF	COAX	<900
161	GUNNER	COAX	NP	S	S	TSV	VIS	D/N	INF	COAX	<900
162	GUNNER	COAX	NP	S	S	TSV	VAL	N	GPD	COAX	<900
163	GUNNER	COAX	NP	S	S	TSV	VIS	D/N	GPD	COAX	<900
164	GUNNER	COAX	NP	S	S	TSV	VIS	D/N	TEL	COAX	<900
165	GUNNER	COAX	NP	S	S	TSV	VAL	N	TEL	COAX	<900
166	GUNNER	COAX	NP	M	S	TROOPS	VAL	N	GPI	COAX	<900
167	GUNNER	COAX	NP	M	S	TROOPS	VIS	D/N	GPD	COAX	<900
168	GUNNER	COAX	NP	M	S	TROOPS	VIS	D/N	TEL	COAX	<900
169	GUNNER	COAX	NP	M	S	TROOPS	VIS	D/N	INF	COAX	<900
170	GUNNER	COAX	NP	M	S	TROOPS	VAL	N	GPD	COAX	<900
171	GUNNER	COAX	NP	M	S	TROOPS	VAL	N	TEL	COAX	<900
172	GUNNER	COAX	NP	M	S	TROOPS	VAL	N	INF	COAX	<900
173	GUNNER	COAX	NP	S	S	TROOPS	VAL	N	GPI	COAX	<900
174	GUNNER	COAX	NP	S	S	TROOPS	VIS	D/N	INF	COAX	<900
175	GUNNER	COAX	NP	S	S	TROOPS	VAL	N	INF	COAX	<900
176	GUNNER	COAX	NP	S	S	TROOPS	VIS	D/N	GPD	COAX	<900
177	GUNNER	COAX	NP	S	S	TROOPS	VAL	N	GPD	COAX	<900
178	GUNNER	COAX	NP	S	S	TROOPS	VIS	D/N	TEL	COAX	<900
179	GUNNER	COAX	NP	S	S	TROOPS	VAL	N	TEL	COAX	<900



JOB OBJECTIVE NO. 124      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "RED LIGHT"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ANNOUNCES "DRIVER, STOP"
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER TURNS INFRARED SIGHT ON
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
- DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
- DRIVER BRAKES

JOB OBJECTIVE NO. 125    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 126    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREMSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT    AMMUNITION: COAX 7.62  
 =====  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 =====  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 =====  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 =====  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES

JOB OBJECTIVE NO. 127    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 128    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CRENSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES

JOB OBJECTIVE NO. 129    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CRENSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "RED LIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER TURNS INFRARED SIGHT ON  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 130      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
     TC ANNOUNCES "GUNNER"  
     TC ANNOUNCES "COAX"  
     TC ANNOUNCES "RED LIGHT"  
     TC ANNOUNCES TARGET DESCRIPTION  
     TC LAYS GUN FOR DIRECTION  
     TC ANNOUNCES "DRIVER, STOP"  
     TC ESTIMATES RANGE  
     TC ANNOUNCES RANGE  
     TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
     GUNNER TURNS ON COAX SWITCH  
     GUNNER TURNS INFRARED SIGHT ON  
     GUNNER ANNOUNCES "IDENTIFIED"  
     GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
     GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
     GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
     GUNNER ANNOUNCES "ON THE WAY"  
     GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
     LOADER PLACES COAX SAFETY IN FIRE POSITION  
     LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
     DRIVER MAINTAINS STEADY RATE OF SPEED  
     DRIVER MANEUVERS TANK FOR FIRING  
     DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
     DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
     DRIVER BRAKES

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JOB OBJECTIVE NO. 131      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION
VEHICLE MOTION: MOVING      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON
TARGET VISIBILITY: VISIBLE      TARGET RANGE: <900 METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT      AMMUNITION: COAX 7.62
=====

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ESTIMATES RANGE
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
*****
GUNNER BEHAVIORS:
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
GUNNER LAYS CIRCLE RETICLE AT INTERPOLATED LEAD POINT FOR TARGET
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX
=====
*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====
*****
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
=====
*****

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JOB OBJECTIVE NO. 132      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT      AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CIRCLE RETICLE AT INTERPOLATED LEAD POINT FOR TARGET  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 133      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES



JOB OBJECTIVE NO. 134    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 135 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 136      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 137    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900    METERS    DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

\*\*\*\*\*



JOB OBJECTIVE NO. 138      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE      TARGET RANGE: <900 METERS      DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
     TC ANNOUNCES "GUNNER"  
     TC ANNOUNCES "COAX"  
     TC ANNOUNCES TARGET DESCRIPTION  
     TC LAYS GUN FOR DIRECTION  
     TC ANNOUNCES "DRIVER, STOP"  
     TC ESTIMATES RANGE  
     TC ANNOUNCES RANGE  
     TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
     GUNNER TURNS ON COAX SWITCH  
     GUNNER ANNOUNCES "IDENTIFIED"  
     GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
     GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
     GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
     GUNNER ANNOUNCES "ON THE WAY"  
     GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
     LOADER PLACES COAX SAFETY IN FIRE POSITION  
     LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
     DRIVER MAINTAINS STEADY RATE OF SPEED  
     DRIVER MANEUVERS TANK FOR FIRING  
     DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
     DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
     DRIVER BRAKES

JOB OBJECTIVE NO. 139    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 140 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE

AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE  
TC ANNOUNCES RANGE  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER SELECTS SABOT OR HEAT  
LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 141      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES



JOB OBJECTIVE NO. 142      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING      TARGET MOTION: STATIONARY      TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES COAX

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

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JOB OBJECTIVE NO. 143      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION
VEHICLE MOTION: MOVING      TARGET MOTION: STATIONARY      TARGET TYPE: TSV
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ESTIMATES RANGE
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX

*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

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JOB OBJECTIVE NO. 144      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION
VEHICLE MOTION: MOVING      TARGET MOTION: STATIONARY      TARGET TYPE: TSV
TARGET VISIBILITY: VISIBLE      TARGET RANGE: <900      METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT      AMMUNITION: COAX 7.62
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ESTIMATES RANGE
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"
*****
GUNNER BEHAVIORS:
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX
*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
*****
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

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JOB OBJECTIVE NO. 145    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:  
 GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:  
 LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:  
 DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 146    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 147 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE  
TC ANNOUNCES RANGE

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 148      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE      TARGET RANGE: <900 METERS      DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES

JOB OBJECTIVE NO. 149 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ESTIMATES RANGE  
TC ANNOUNCES RANGE  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 150      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING      TARGET MOTION: STATIONARY      TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ESTIMATES RANGE  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 151    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 152      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "RED LIGHT"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER TURNS INFRARED SIGHT ON
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 153      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 GUNNER LAYS CIRCLE RETICLE AT INTERPOLATED LEAD POINT FOR TARGET  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



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JOB OBJECTIVE NO. 154      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION
VEHICLE MOTION: STATIONARY      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON
TARGET VISIBILITY: VISIBLE      TARGET RANGE: <900      METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES "MOVING"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ESTIMATES RANGE
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
GUNNER LAYS CIRCLE RETICLE AT INTERPOLATED LEAD POINT FOR TARGET
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX

*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 155    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITIONS: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 156      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

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GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

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LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 157    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 150    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 159 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 160    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 161 CREW MEMBER: GUNNER WEAPON: COAX FLYING MODE: NON-PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT  
AMMUNITION: COAX 7.62

**TANK COMMANDER BEHAVIORS:**  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE

\*\*\*\*\*  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
\*\*\*\*\*  
GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET  
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES COAX

GUNNER FIRES COAX  
\*\*\*\*\*  
LOADER BEHAVIORS:  
    LOADER PLACES COAX SAFETY IN FIRE POSITION  
    LOADER ANNOUNCES "UP"

[illegible]



JOB OBJECTIVE NO. 162      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
 \*\*\*\*\*

JOB OBJECTIVE NO. 163    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900    METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 164    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 165    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:  
 GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 GUNNER ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:  
 LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



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JOB OBJECTIVE NO. 166      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: COAX 7.62

=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES "REDLIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ESTIMATES RANGE
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON COAX SWITCH
GUNNER TURNS INFRARED SIGHT ON
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
GUNNER LAYS COAX FOR DIRECTION ON EDGE OF TARGET
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX
=====
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
=====

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JOB OBJECTIVE NO. 167    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
- GUNNER LAYS COAX FOR DIRECTION ON EDGE OF TARGET
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 168      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS  
TARGET VISIBILITY: VISIBLE      TARGET RANGE: <900      METERS      DAY/NIGHT: DAY OR NIGHT

AMMUNITION: COAX 7.62

FIRE CONTROL INSTRUMENT: TELESCOPE

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
- GUNNER LAYS COAX FOR DIRECTION ON EDGE OF TARGET
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 169 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:  
 GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
 GUNNER LAYS COAX FOR DIRECTION ON EDGE OF TARGET  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:  
 LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:  
 DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



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JOB OBJECTIVE NO. 170      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: COAX 7.62

=====
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ESTIMATES RANGE
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"
=====
GUNNER BEHAVIORS:
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
GUNNER LAYS COAX FOR DIRECTION ON EDGE OF TARGET
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX
=====
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====
DRIVER BEHAVIORS:
DRIVER MAINTAINS STEADY RATE OF SPEED
DRIVER MANEUVERS TANK FOR FIRING
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS
=====

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JOB OBJECTIVE NO. 171 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
 GUNNER LAYS COAX FOR DIRECTION ON EDGE OF TARGET  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 172    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "IDENTIFIED"  
 GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
 GUNNER LAYS COAX FOR DIRECTION ON EDGE OF TARGET  
 GUNNER ANNOUNCES "ON THE WAY"  
 GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 173      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900      METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 174    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900    METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: INFINITY SIGHT    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 175      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION
VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ESTIMATES RANGE
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX

*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 176      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE      TARGET RANGE: <900 METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES TARGET DESCRIPTION
TC LAYS GUN FOR DIRECTION
TC ESTIMATES RANGE
TC ANNOUNCES RANGE
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ..FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX

*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 177 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 178      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE      TARGET RANGE: <900 METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

\*\*\*\*\*

JOB OBJECTIVE NO. 179 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE

AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES "WITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ESTIMATES RANGE  
TC ANNOUNCES RANGE  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

\*\*\*\*\*

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES COAX

\*\*\*\*\*

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

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# Cluster 12

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
180	GUNNER	COAX	RCLD	S	M	TSV/CREW	VAL	N	GPI	COAX	<900
181	GUNNER	COAX	RCLD	S	S	TSV	VAL	N	GPI	COAX	<900
182	GUNNER	COAX	RCLD	S	S	TROOPS	VAL	N	GPI	COAX	<900
183	GUNNER	COAX	RCLD	S	M	TSV/CREW	VAL	N	GPD	COAX	<900
184	GUNNER	COAX	RCLD	S	M	TSV/CREW	VAL	N	INF	COAX	<900
185	GUNNER	COAX	RCLD	S	S	TSV	VAL	N	GPD	COAX	<900
186	GUNNER	COAX	RCLD	S	M	TSV/CREW	VAL	N	TEL	COAX	<900
187	GUNNER	COAX	RCLD	S	S	TSV	VAL	N	INF	COAX	<900
188	GUNNER	COAX	RCLD	S	S	TSV	VAL	N	TEL	COAX	<900
189	GUNNER	COAX	RCLD	S	S	TROOPS	VAL	N	GPD	COAX	<900
190	GUNNER	COAX	RCLD	S	S	TROOPS	VAL	N	INF	COAX	<900
191	GUNNER	COAX	RCLD	S	S	TROOPS	VAL	N	TEL	COAX	<900
192	GUNNER	COAX	RC	S	S	TSV	NVIS	D/N	AUX	COAX	<900

JOB OBJECTIVE NO. 180 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "COAX"

TC ANNOUNCES "REDLIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON COAX SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY

GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



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JOB OBJECTIVE NO. 181      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER, DIRECT FIRE"
TC ANNOUNCES "COAX"
TC ANNOUNCES "REDLIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC INDEXES RANGE INTO RANGEFINDER
TC ANNOUNCES RANGE
TC ANNOUNCES DEFLECTION
TC VERIFYS DEFLECTION READBACK
TC ANNOUNCES QUADRANT ELEVATION
TC VERIFYS QUADRANT ELEVATION READBACK
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON TURRET POWER
GUNNER TURNS ON COAX SWITCH
GUNNER TURNS INFRARED SIGHT ON
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
GUNNER READS BACK DEFLECTION
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
GUNNER READS BACK QUADRANT ELEVATION
GUNNER LEVELS BUBBLE
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX

*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 182    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE INFRARED    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER, DIRECT FIRE"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "RED LIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC INDEXES RANGE INTO RANGEFINDER  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES DEFLECTION  
   TC VERIFYS DEFLECTION READBACK  
   TC ANNOUNCES QUADRANT ELEVATION  
   TC VERIFYS QUADRANT ELEVATION READBACK  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON TURRET POWER  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER TURNS INFRARED SIGHT ON  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
   GUNNER READS BACK DEFLECTION  
   GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
   GUNNER READS BACK QUADRANT ELEVATION  
   GUNNER LEVELS BUBBLE  
   GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 183      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY      TARGET MOTION: MOVING      TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900      METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "COAX"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

GUNNER LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY

GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 184 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING

TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "COAX"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

GUNNER LAYS CIRCLE RETICLE AT INTERPOLATED LEAD POINT FOR TARGET

GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 105 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "COAX"

TC ANNOUNCES "WITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "IDENTIFIED"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

GUNNER ANNOUNCES "ON THE WAY"

GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 186    CREW MEMBER: GUNNER    WEAPON: COAX    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER, DIRECT FIRE"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC INDEXES RANGE INTO RANGEFINDER
- TC ANNOUNCES RANGE
- TC ANNOUNCES DEFLECTION
- TC VERIFYS DEFLECTION READBACK
- TC ANNOUNCES QUADRANT ELEVATION
- TC VERIFYS QUADRANT ELEVATION READBACK
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:

- GUNNER TURNS ON TURRET POWER
- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
- GUNNER READS BACK DEFLECTION
- GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- GUNNER READS BACK QUADRANT ELEVATION
- GUNNER LEVELS BUBBLE
- GUNNER APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- GUNNER LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

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LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 187 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER, DIRECT FIRE"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC INDEXES RANGE INTO RANGEFINDER
- TC ANNOUNCES RANGE
- TC ANNOUNCES DEFLECTION
- TC VERIFYS DEFLECTION READBACK
- TC ANNOUNCES QUADRANT ELEVATION
- TC VERIFYS QUADRANT ELEVATION READBACK
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

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GUNNER BEHAVIORS:

- GUNNER TURNS ON TURRET POWER
- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
- GUNNER READS BACK DEFLECTION
- GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- GUNNER READS BACK QUADRANT ELEVATION
- GUNNER LEVELS BUBBLE
- GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

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LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 100 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TELESCOPE AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER, DIRECT FIRE"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC INDEXES RANGE INTO RANGEFINDER
- TC ANNOUNCES RANGE
- TC ANNOUNCES DEFLECTION
- TC VERIFYS DEFLECTION READBACK
- TC ANNOUNCES QUADRANT ELEVATION
- TC VERIFYS QUADRANT ELEVATION READBACK
- TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

- GUNNER TURNS ON TURRET POWER
- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "IDENTIFIED"
- GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
- GUNNER READS BACK DEFLECTION
- GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- GUNNER READS BACK QUADRANT ELEVATION
- GUNNER LEVELS BUBBLE
- GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
- GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- GUNNER ANNOUNCES "ON THE WAY"
- GUNNER FIRES COAX

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



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JOB OBJECTIVE NO. 189      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: GUNNER'S PERISCOPE DAY      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:
=====
TC ANNOUNCES "GUNNER, DIRECT FIRE"
TC ANNOUNCES "COAX"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC INDEXES RANGE INTO RANGEFINDER
TC ANNOUNCES RANGE
TC ANNOUNCES DEFLECTION
TC VERIFYS DEFLECTION READBACK
TC ANNOUNCES QUADRANT ELEVATION
TC VERIFYS QUADRANT ELEVATION READBACK
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
=====
GUNNER BEHAVIORS:
=====
GUNNER TURNS ON TURRET POWER
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "IDENTIFIED"
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
GUNNER READS BACK DEFLECTION
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
GUNNER READS BACK QUADRANT ELEVATION
GUNNER LEVELS BUBBLE
GUNNER LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX
=====
LOADER BEHAVIORS:
=====
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
=====
DRIVER BEHAVIORS:
=====

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JOB OBJECTIVE NO. 190 CREW MEMBER: GUNNER WEAPON: COAX FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: INFINITY SIGHT AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES "WHITELIGHT"  
TC ANNOUNCES TARGET DESCRIPTION  
TC INDEXES RANGE INTO RANGEFINDER  
TC ANNOUNCES RANGE  
TC ANNOUNCES DEFLECTION  
TC VERIFYS DEFLECTION READBACK  
TC ANNOUNCES QUADRANT ELEVATION  
TC VERIFYS QUADRANT ELEVATION READBACK  
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER  
GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "IDENTIFIED"  
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
GUNNER READS BACK DEFLECTION  
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
GUNNER READS BACK QUADRANT ELEVATION  
GUNNER LEVELS BUBBLE  
GUNNER LAYS CIRCLE RETICLE AT CENTER OF TARGET  
GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
GUNNER ANNOUNCES "ON THE WAY"  
GUNNER FIRES COAX

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 191      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE  
 VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TELESCOPE      AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER, DIRECT FIRE"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC INDEXES RANGE INTO RANGEFINDER  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES DEFLECTION  
   TC VERIFYS DEFLECTION READBACK  
   TC ANNOUNCES QUADRANT ELEVATION  
   TC VERIFYS QUADRANT ELEVATION READBACK  
   TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON TURRET POWER  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "IDENTIFIED"  
   GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
   GUNNER READS BACK DEFLECTION  
   GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
   GUNNER READS BACK QUADRANT ELEVATION  
   GUNNER LEVELS BUBBLE  
   GUNNER LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   GUNNER ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
   GUNNER ANNOUNCES "ON THE WAY"  
   GUNNER FIRES COAX  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 192      CREW MEMBER: GUNNER      WEAPON: COAX      FIRING MODE: RANGE CARD
VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TSV
TARGET VISIBILITY: NOT VISIBLE      TARGET RANGE: <900      METERS      DAY/NIGHT: DAY OR NIGHT
FIRE CONTROL INSTRUMENT: AUXILIARY FIRE CONTROLS      AMMUNITION: COAX 7.62
TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER"
TC ANNOUNCES "COAX"
TC ANNOUNCES TARGET DESCRIPTION
TC INDEXES RANGE INTO RANGEFINDER
TC ANNOUNCES RANGE
TC ANNOUNCES DEFLECTION
TC VERIFYS DEFLECTION READBACK
TC ANNOUNCES QUADRANT ELEVATION
TC VERIFYS QUADRANT ELEVATION READBACK
TC ANNOUNCES "FIRE" OR "AT MY COMMAND, ...FIRE"
*****
GUNNER BEHAVIORS:
GUNNER TURNS ON TURRET POWER
GUNNER TURNS ON COAX SWITCH
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
GUNNER READS BACK DEFLECTION
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
GUNNER READS BACK QUADRANT ELEVATION
GUNNER LEVELS BU88LE
GUNNER ANNOUNCES "ON THE WAY"
GUNNER FIRES COAX
*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"
*****
DRIVER BEHAVIORS:

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# Cluster13

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
193	TC	COAX	NP	MH	M	TSV/CREW	VAL	N	RFI	COAX	<900
194	TC	COAX	NP	MH	S	TSV	VAL	N	RFI	COAX	<900
195	TC	COAX	NP	M	S	TSV	VAL	N	RFI	COAX	<900
196	TC	COAX	NP	MH	M	TSV/CREW	VAL	N	RFD	COAX	<900
197	TC	COAX	NP	M	M	TSV/CREW	VAL	N	RFI	COAX	<900
198	TC	COAX	NP	MH	S	TSV	VAL	N	RFD	COAX	<900
199	TC	COAX	NP	M	S	TSV	VAL	N	RFD	COAX	<900
200	TC	COAX	NP	M	M	TSV/CREW	VAL	N	RFD	COAX	<900
201	TC	COAX	NP	MH	M	TSV/CREW	VIS	D/N	RFD	COAX	<900
202	TC	COAX	NP	S	M	TSV/CREW	VAL	N	RFI	COAX	<900
203	TC	COAX	NP	MH	S	TSV	VIS	D/N	RFD	COAX	<900
204	TC	COAX	NP	S	S	TSV	VAL	N	RFD	COAX	<900
205	TC	COAX	NP	M	S	TSV	VIS	D/N	RFD	COAX	<900
206	TC	COAX	NP	S	M	TSV/CREW	VAL	N	RFD	COAX	<900
207	TC	COAX	NP	M	M	TSV/CREW	VIS	D/N	RFD	COAX	<900
208	TC	COAX	NP	S	S	TSV	VAL	N	RFI	COAX	<900
209	TC	COAX	NP	S	S	TSV	VIS	D/N	RFD	COAX	<900
210	TC	COAX	NP	S	M	TSV	VIS	D/N	RFD	COAX	<900
211	TC	COAX	NP	M	S	TROOPS	VAL	N	RFI	COAX	<900
212	TC	COAX	NP	S	S	TROOPS	VAL	N	RFI	COAX	<900
213	TC	COAX	NP	M	S	TROOPS	VAL	N	RFD	COAX	<900
214	TC	COAX	NP	S	S	TROOPS	VAL	N	RFD	COAX	<900
215	TC	COAX	NP	M	S	TROOPS	VIS	D/N	RFD	COAX	<900
216	TC	COAX	NP	S	S	TROOPS	VIS	D/N	RFD	COAX	<900

JOB OBJECTIVE NO. 193    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900    METERS    DAY/NIGHT: NIGHT  
 FIRE CONTRL INSTRUMENT: RANGEFINDER-INFRARED    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "REDLIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC TURNS RANGEFINDER RETICLE SIGHT ON  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC ANNOUNCES "FROM MY POSITION"  
   TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES COAX  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER TURNS INFRARED SIGHT ON  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 194    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "REDLIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC TURNS RANGEFINDER RETICLE SIGHT ON  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
 TC ANNOUNCES "FROM MY POSITION"  
 TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 TC ANNOUNCES "ON THE WAY"  
 TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER TURNS INFRARED SIGHT ON  
 GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES

JOB OBJECTIVE NO. 195 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 196    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC TURNS RANGEFINDER RETICLE SIGHT ON  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
 TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 TC ANNOUNCES "FROM MY POSITION"  
 TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 TC ANNOUNCES "ON THE WAY"  
 TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES

JOB OBJECTIVE NO. 197 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED AMMUNITION: COAX 7.62

# TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "REOLIGHT"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC TURNS RANGEFINDER RETICLE SIGHT ON  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 TC ANNOUNCES "FROM MY POSITION"  
 TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
 TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 TC ANNOUNCES "ON THE WAY"  
 TC FIRES COAX

# GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER TURNS INFRARED SIGHT ON  
 GUNNER ANNOUNCES "CANNOT IDENTIFY"

# LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

# DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 198 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "WHITELIGHT"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC TURNS RANGEFINDER RETICLE SIGHT ON  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
 TC ANNOUNCES "FROM MY POSITION"  
 TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 TC ANNOUNCES "ON THE WAY"  
 TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES

JOB OBJECTIVE NO. 199 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING

TARGET MOTION: STATIONARY

TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY

AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 200    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CRENSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CTRL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "WHITELIGHT"  
   TC ANNOUNCES "MOVING"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC TURNS RANGEFINDER RETICLE SIGHT ON  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC ANNOUNCES "FROM MY POSITION"  
   TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
   TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES COAX  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 201 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7-62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES "MOVING"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE  
TC ANNOUNCES RANGE  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC ANNOUNCES "FROM MY POSITION"  
TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
TC ANNOUNCES "ON THE WAY"  
TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 202 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION  
VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES "MOVING"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

TC ANNOUNCES "FROM MY POSITION"

TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY

TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 203 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE  
TC ANNOUNCES RANGE  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "FROM MY POSITION"  
TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
TC ANNOUNCES "ON THE WAY"  
TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 204 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 205    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: TSV  
TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
TC ANNOUNCES "COAX"  
TC ANNOUNCES TARGET DESCRIPTION  
TC LAYS GUN FOR DIRECTION  
TC ESTIMATES RANGE  
TC ANNOUNCES RANGE  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC ANNOUNCES "FROM MY POSITION"  
TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
TC ANNOUNCES "ON THE WAY"  
TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 206    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC TURNS RANGEFINDER RETICLE SIGHT ON
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- TC ANNOUNCES "FROM MY POSITION"
- TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
- TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- TC ANNOUNCES "ON THE WAY"
- TC FIRES COAX

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GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "CANNOT IDENTIFY"

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 207 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- TC ANNOUNCES "FROM MY POSITION"
- TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
- TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- TC ANNOUNCES "ON THE WAY"
- TC FIRES COAX

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GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "CANNOT IDENTIFY"

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 208 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "RED LIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC LAYS GUN FOR DIRECTION
- TC ESTIMATES RANGE
- TC ANNOUNCES RANGE
- TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- TC ANNOUNCES "FROM MY POSITION"
- TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)
- TC ANNOUNCES "ON THE WAY"
- TC FIRES COAX

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GUNNER BEHAVIORS:

- GUNNER TURNS ON COAX SWITCH
- GUNNER TURNS INFRARED SIGHT ON
- GUNNER ANNOUNCES "CANNOT IDENTIFY"

\*\*\*\*\*

LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

\*\*\*\*\*

DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 209 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:



JOB OBJECTIVE NO. 210 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TSV  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"  
 TC ANNOUNCES "COAX"  
 TC ANNOUNCES "MOVING"  
 TC ANNOUNCES TARGET DESCRIPTION  
 TC LAYS GUN FOR DIRECTION  
 TC ESTIMATES RANGE  
 TC ANNOUNCES RANGE  
 TC ANNOUNCES "FROM MY POSITION"  
 TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
 TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS  
 TC ADDS 5 MILS ELEVATION (RANGE > 400 METERS)  
 TC ANNOUNCES "ON THE WAY"  
 TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH  
 GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION  
 LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 211    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "RED LIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC TURNS RANGEFINDER RETICLE SIGHT ON  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES "FROM MY POSITION"  
   TC ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
   TC LAYS COAX FOR DIRECTION ON EDGE OF TARGET  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES COAX  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER TURNS INFRARED SIGHT ON  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 212 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "RED LIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER TURNS INFRARED SIGHT ON

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 213 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS

TC LAYS COAX FOR DIRECTION ON EDGE OF TARGET

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 214 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES "WHITELIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 215 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE TARGET RANGE: <900 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER"

TC ANNOUNCES "COAX"

TC ANNOUNCES TARGET DESCRIPTION

TC LAYS GUN FOR DIRECTION

TC ESTIMATES RANGE

TC ANNOUNCES RANGE

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS

TC LAYS COAX FOR DIRECTION ON EDGE OF TARGET

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 216    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <900 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC LAYS GUN FOR DIRECTION  
   TC ESTIMATES RANGE  
   TC ANNOUNCES RANGE  
   TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   TC ANNOUNCES "FROM MY POSITION"  
   TC ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES COAX  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:

# Cluster 14

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
217	TC	COAX	RCLD	S	S	TSV	VAL	N	RFI	COAX	<900
218	TC	COAX	RCLD	S	M	TSV/CREW	VAL	N	RFI	COAX	<900
219	TC	COAX	RCLD	S	S	TROOPS	VAL	N	RFI	COAX	<900
220	TC	COAX	RCLD	S	S	TSV	VAL	N	RFD	COAX	<900
221	TC	COAX	RCLD	S	M	TSV/CREW	VAL	N	RFD	COAX	<900
222	TC	COAX	RCLD	S	S	TROOPS	VAL	N	RFD	COAX	<900



JOB OBJECTIVE NO. 217 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "GUNNER, DIRECT FIRE"

TC ANNOUNCES "COAX"

TC ANNOUNCES "REDLIGHT"

TC ANNOUNCES TARGET DESCRIPTION

TC INDEXES RANGE INTO RANGEFINDER

TC TURNS RANGEFINDER RETICLE SIGHT ON

TC ANNOUNCES RANGE

TC ANNOUNCES DEFLECTION

TC VERIFYS DEFLECTION READBACK

TC ANNOUNCES QUADRANT ELEVATION

TC VERIFYS QUADRANT ELEVATION READBACK

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ANNOUNCES "FROM MY POSITION"

TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS

TC ANNOUNCES "ON THE WAY"

TC FIRES COAX

GUNNER BEHAVIORS:

GUNNER TURNS ON TURRET POWER

GUNNER TURNS ON COAX SWITCH

GUNNER ANNOUNCES "CANNOT IDENTIFY"

GUNNER TRAVERSES TO ANNOUNCED DEFLECTION

GUNNER READS BACK DEFLECTION

GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION

GUNNER READS BACK QUADRANT ELEVATION

GUNNER LEVELS BUBBLE

LOADER BEHAVIORS:

LOADER PLACES COAX SAFETY IN FIRE POSITION

LOADER ANNOUNCES "UP"

DRIVER BEHAVIORS:

JOB OBJECTIVE NO. 218    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER, DIRECT FIRE"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "REDLIGHT"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC INDEXES RANGE INTO RANGEFINDER
- TC TURNS RANGEFINDER RETICLE SIGHT ON
- TC ANNOUNCES RANGE
- TC ANNOUNCES DEFLECTION
- TC VERIFYS DEFLECTION READBACK
- TC ANNOUNCES QUADRANT ELEVATION
- TC VERIFYS QUADRANT ELEVATION READBACK
- TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- TC ANNOUNCES "FROM MY POSITION"
- TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
- TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- TC ANNOUNCES "ON THE WAY"
- TC FIRES COAX

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GUNNER BEHAVIORS:

- GUNNER TURNS ON TURRET POWER
- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "CANNOT IDENTIFY"
- GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
- GUNNER READS BACK DEFLECTION
- GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- GUNNER READS BACK QUADRANT ELEVATION
- GUNNER LEVELS BUBBLE

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LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 219    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: RANGEFINDER-INFRARED    AMMUNITION: COAX 7.62  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "GUNNER, DIRECT FIRE"  
   TC ANNOUNCES "COAX"  
   TC ANNOUNCES "REDLIGHT"  
   TC ANNOUNCES TARGET DESCRIPTION  
   TC INDEXES RANGE INTO RANGEFINDER  
   TC TURNS RANGEFINDER RETICLE SIGHT ON  
   TC ANNOUNCES RANGE  
   TC ANNOUNCES DEFLECTION  
   TC VERIFYS DEFLECTION READBACK  
   TC ANNOUNCES QUADRANT ELEVATION  
   TC VERIFYS QUADRANT ELEVATION READBACK  
   TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   TC ANNOUNCES "FROM MY POSITION"  
   TC ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS  
   TC ANNOUNCES "ON THE WAY"  
   TC FIRES COAX  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
   GUNNER TURNS ON TURRET POWER  
   GUNNER TURNS ON COAX SWITCH  
   GUNNER ANNOUNCES "CANNOT IDENTIFY"  
   GUNNER TRAVERSES TO ANNOUNCED DEFLECTION  
   GUNNER READS BACK DEFLECTION  
   GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION  
   GUNNER READS BACK QUADRANT ELEVATION  
   GUNNER LEVELS BUBBLE  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER PLACES COAX SAFETY IN FIRE POSITION  
   LOADER ANNOUNCES "UP"  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
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JOB OBJECTIVE NO. 220      CREW MEMBER: TANK COMMANDER      WEAPON: COAX      FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TSV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <900 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY      AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "GUNNER, DIRECT FIRE"
TC ANNOUNCES "COAX"
TC ANNOUNCES "WHITELIGHT"
TC ANNOUNCES TARGET DESCRIPTION
TC INDEXES RANGE INTO RANGEFINDER
TC TURNS RANGEFINDER RETICLE SIGHT ON
TC ANNOUNCES RANGE
TC ANNOUNCES DEFLECTION
TC VERIFYS DEFLECTION READBACK
TC ANNOUNCES QUADRANT ELEVATION
TC VERIFYS QUADRANT ELEVATION READBACK
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
TC ANNOUNCES "FROM MY POSITION"
TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
TC ANNOUNCES "ON THE WAY"
TC FIRES COAX

*****
GUNNER BEHAVIORS:
GUNNER TURNS ON TURRET POWER
GUNNER TURNS ON COAX SWITCH
GUNNER ANNOUNCES "CANNOT IDENTIFY"
GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
GUNNER READS BACK DEFLECTION
GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
GUNNER READS BACK QUADRANT ELEVATION
GUNNER LEVELS BUBBLE

*****
LOADER BEHAVIORS:
LOADER PLACES COAX SAFETY IN FIRE POSITION
LOADER ANNOUNCES "UP"

*****
DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 221 CREW MEMBER: TANK COMMANDER WEAPON: COAX FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: TSV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <900 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER, DIRECT FIRE"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "WHELIGHT"
- TC ANNOUNCES "MOVING"
- TC ANNOUNCES TARGET DESCRIPTION
- TC INDEXES RANGE INTO RANGEFINDER
- TC TURNS RANGEFINDER RETICLE SIGHT ON
- TC ANNOUNCES RANGE
- TC ANNOUNCES DEFLECTION
- TC VERIFYS DEFLECTION READBACK
- TC ANNOUNCES QUADRANT ELEVATION
- TC VERIFYS QUADRANT ELEVATION READBACK
- TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- TC ANNOUNCES "FROM MY POSITION"
- TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY
- TC ADJUST COAXIAL MACHINEGUN BURST FOR POINT TARGETS
- TC ANNOUNCES "ON THE WAY"
- TC FIRES COAX

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GUNNER BEHAVIORS:

- GUNNER TURNS ON TURRET POWER
- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "CANNOT IDENTIFY"
- GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
- GUNNER READS BACK DEFLECTION
- GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- GUNNER READS BACK QUADRANT ELEVATION
- GUNNER LEVELS BUBBLE

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LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

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JOB OBJECTIVE NO. 222    CREW MEMBER: TANK COMMANDER    WEAPON: COAX    FIRING MODE: RANGE CARD LAY TO DIRECT FIRE

VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <900 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: RANGEFINDER-DAY    AMMUNITION: COAX 7.62

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "GUNNER, DIRECT FIRE"
- TC ANNOUNCES "COAX"
- TC ANNOUNCES "WHITELIGHT"
- TC ANNOUNCES TARGET DESCRIPTION
- TC INDEXES RANGE INTO RANGEFINDER
- TC TURNS RANGEFINDER RETICLE SIGHT ON
- TC ANNOUNCES RANGE
- TC ANNOUNCES DEFLECTION
- TC VERIFYS DEFLECTION READBACK
- TC ANNOUNCES QUADRANT ELEVATION
- TC VERIFYS QUADRANT ELEVATION READBACK
- TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- TC ANNOUNCES "FROM MY POSITION"
- TC ADJUST COAXIAL MACHINEGUN BURST FOR AREA TARGETS
- TC ANNOUNCES "ON THE WAY"
- TC FIRES COAX

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GUNNER BEHAVIORS:

- GUNNER TURNS ON TURRET POWER
- GUNNER TURNS ON COAX SWITCH
- GUNNER ANNOUNCES "CANNOT IDENTIFY"
- GUNNER TRAVERSES TO ANNOUNCED DEFLECTION
- GUNNER READS BACK DEFLECTION
- GUNNER INDEXES ANNOUNCED QUADRANT ELEVATION
- GUNNER READS BACK QUADRANT ELEVATION
- GUNNER LEVELS BUBBLE

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LOADER BEHAVIORS:

- LOADER PLACES COAX SAFETY IN FIRE POSITION
- LOADER ANNOUNCES "UP"

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DRIVER BEHAVIORS:

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# Cluster 15

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
223	TC	CAL.50	NP	MH	S	AIR	VAL	N	TP1	CAL.50	<1000
224	TC	CAL.50	NP	MH	M	AIR	VAL	N	TP1	CAL.50	<1000
225	TC	CAL.50	NP	M	S	AIR	VAL	N	TP1	CAL.50	<1000
226	TC	CAL.50	NP	S	S	AIR	VAL	N	TP1	CAL.50	<1000
227	TC	CAL.50	NP	MH	S	LAV/CREW	VAL	N	TP1	CAL.50	<1000
228	TC	CAL.50	NP	M	M	AIR	VAL	N	TP1	CAL.50	<1000
229	TC	CAL.50	NP	MH	S	TROOPS	VAL	N	TP1	CAL.50	<1000
230	TC	CAL.50	NP	S	M	AIR	VAL	N	TP1	CAL.50	<1000
231	TC	CAL.50	NP	MH	M	LAV	VAL	N	TP1	CAL.50	<1000
232	TC	CAL.50	NP	M	S	LAV/CREW	VAL	N	TP1	CAL.50	<1000
233	TC	CAL.50	NP	S	S	LAV/CREW	VAL	N	TP1	CAL.50	<1000
234	TC	CAL.50	NP	S	S	TROOPS	VAL	N	TP1	CAL.50	<1000
235	TC	CAL.50	NP	M	S	LAV	VAL	N	TP1	CAL.50	<1000
236	TC	CAL.50	NP	S	M	LAV	VAL	N	TP1	CAL.50	<1000
237	TC	CAL.50	NP	M	S	TROOPS	VAL	N	TP1	CAL.50	<1000

JOB OBJECTIVE NO. 223 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: AIRCRAFT  
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT  
FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED AMMUNITION: CAL. 50  
TANK COMMANDER BEHAVIORS:  
TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
TC ANNOUNCES "DRIVER, STOP"  
TC TURNS INFRARED SIGHT ON  
TC LAYS GROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
TC FIRES CALIBER FIFTY  
\*\*\*\*\*  
GUNNER BEHAVIORS:  
\*\*\*\*\*  
LOADER BEHAVIORS:  
LOADER MOVES TO POSITION FOR OBSERVATION  
\*\*\*\*\*  
DRIVER BEHAVIORS:  
DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

**A-241**



JOB OBJECTIVE NO. 224 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: MOVING TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
TC ANNOUNCES "DRIVER, STOP"  
TC TURNS INFRARED SIGHT ON  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 225 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING

TARGET MOTION: STATIONARY

TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFERED AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
TC TURNS INFERED SIGHT ON  
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 226    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1000 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED    AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "CALIBER FIFTY"
- TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
- TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION
- TC TURNS INFRARED SIGHT ON
- TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS
- TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 227    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: LAV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1000 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC TURNS INFRARED SIGHT ON  
   TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
   TC FIRES CALIBER FIFTY  
 GUNNER BEHAVIORS:  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 228 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING

TARGET MOTION: MOVING

TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"

TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION

TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION

TC TURNS INFRARED SIGHT ON

TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS

TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 229 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "CALIBER FIFTY"
- TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
- TC ANNOUNCES "DRIVER, STOP"
- TC TURNS INFRARED SIGHT ON
- TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
- TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS
- TC FIRES CALIBER FIFTY

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GUNNER BEHAVIORS:

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LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

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DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER MOVES TO HULL DOWN FIRING POSITION
- DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
- DRIVER BRAKES



JOB OBJECTIVE NO. 230    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: AIRCRAFT  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1000 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED    AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
 TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
 TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
 TC TURNS INFRARED SIGHT ON  
 TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
 TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
 TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 231    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1000 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC TURNS INFRARED SIGHT ON  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
   TC FIRES CALIBER FIFTY  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES



JOB OBJECTIVE NO. 232    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: LAV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1000 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC TURNS INFRARED SIGHT ON  
   TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
   TC FIRES CALIBER FIFTY  
 GUNNER BEHAVIORS:  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

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JOB OBJECTIVE NO. 233      CREW MEMBER: TANK COMMANDER      WEAPON: CAL. 50      FIRING MODE: NON-PRECISION
VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: LAV OR CREWSERVED WEAPON
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1000 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED      AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "CALIBER FIFTY"
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
TC TURNS INFRARED SIGHT ON
TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY
TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS
TC FIRES CALIBER FIFTY

*****
GUNNER BEHAVIORS:
*****
LOADER BEHAVIORS:
LOADER MOVES TO POSITION FOR OBSERVATION
*****
DRIVER BEHAVIORS:
DRIVER DRIVER BRAKES
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JOB OBJECTIVE NO. 234 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"

TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION

TC TURNS INFRARED SIGHT ON

TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY

TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS

TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 235    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1000 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC TURNS INFRARED SIGHT ON  
   TC LAYS CROSSHAIR AT CENTER OF TARGET VULNERABILITY  
   TC FIRES CALIBER FIFTY  
 GUNNER BEHAVIORS:  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 236 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC TURNS INFRARED SIGHT ON  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC LAYS CROSSHAIR LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 237 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1000 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE INFRARED AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "CALIBER FIFTY"
- TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
- TC TURNS INFRARED SIGHT ON
- TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS
- TC LAYS M85 FOR DIRECTION ON EDGE OF TARGET
- TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



# Cluster 16

OBJECTIVE NUMBER	CREW MEMBER	WEAPON	FIRING MODE	FIRING VEHICLE MOTION	TARGET MOTION	TARGET TYPE	TARGET VISIBILITY	DAY OR NIGHT	FIRE CONTROL INSTRUMENT	AMMUNITION	TARGET RANGE
238	TC	CAL.50	NP	MH	S	AIR	VIS	D/N	TPD	CAL.50	<2300
239	TC	CAL.50	NP	MH	S	AIR	VAL	N	TPD	CAL.50	<2300
240	TC	CAL.50	NP	MH	S	LAV/CREW	VIS	D/N	TPD	CAL.50	<1600
241	TC	CAL.50	NP	MH	S	LAV/CREW	VAL	N	TPD	CAL.50	<1600
242	TC	CAL.50	NP	M	S	AIR	VAL	N	TPD	CAL.50	<2300
243	TC	CAL.50	NP	S	S	AIR	VAL	N	TPD	CAL.50	<2300
244	TC	CAL.50	NP	MH	S	TROOPS	VIS	D/N	TPD	CAL.50	<1600
245	TC	CAL.50	NP	MH	S	TROOPS	VAL	N	TPD	CAL.50	<1600
246	TC	CAL.50	NP	M	S	LAV/CREW	VIS	D/N	TPD	CAL.50	<1600
247	TC	CAL.50	NP	M	S	LAV/CREW	VAL	N	TPD	CAL.50	<1600
248	TC	CAL.50	NP	M	S	LAV	VIS	D/N	TPD	CAL.50	<1600
249	TC	CAL.50	NP	M	S	LAV	VAL	N	TPD	CAL.50	<1600
250	TC	CAL.50	NP	MH	S	AIR	VIS	D/N	TPD	CAL.50	<2300
251	TC	CAL.50	NP	MH	M	AIR	VAL	N	TPD	CAL.50	<2300
252	TC	CAL.50	NP	MH	M	LAV	VIS	D/N	TPD	CAL.50	<1600
253	TC	CAL.50	NP	MH	M	LAV	VAL	N	TPD	CAL.50	<1600
254	TC	CAL.50	NP	S	S	LAV/CREW	VIS	D/N	TPD	CAL.50	<1600
255	TC	CAL.50	NP	S	S	LAV/CREW	VAL	N	TPD	CAL.50	<1600
256	TC	CAL.50	NP	M	S	AIR	VIS	D/N	TPD	CAL.50	<2300
257	TC	CAL.50	NP	M	M	AIR	VAL	N	TPD	CAL.50	<2300
258	TC	CAL.50	NP	M	M	AIR	VIS	D/N	TPD	CAL.50	<2300
259	TC	CAL.50	NP	S	S	TROOPS	VIS	D/N	TPD	CAL.50	<1600
260	TC	CAL.50	NP	S	S	TROOPS	VAL	N	TPD	CAL.50	<1600
261	TC	CAL.50	NP	S	M	AIR	VIS	D/N	TPD	CAL.50	<2300
262	TC	CAL.50	NP	S	M	AIR	VAL	N	TPD	CAL.50	<2300
263	TC	CAL.50	NP	S	M	LAV	VIS	D/N	TPD	CAL.50	<1600
264	TC	CAL.50	NP	S	M	LAV	VAL	N	TPD	CAL.50	<1600
265	TC	CAL.50	NP	M	S	TROOPS	VIS	D/N	TPD	CAL.50	<1600
266	TC	CAL.50	NP	M	S	TROOPS	VAL	N	TPD	CAL.50	<1600

JOB OBJECTIVE NO. 238      CREW MEMBER: TANK COMMANDER      WEAPON: CAL. 50      FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TO A HALT      TARGET MOTION: STATIONARY      TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE      TARGET RANGE: <2300 METERS      DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY      AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "CALIBER FIFTY"
- TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
- TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION
- TC ANNOUNCES "DRIVER, STOP"
- TC ESTIMATES RANGE
- TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
- TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS
- TC FIRES CALIBER FIFTY

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GUNNER BEHAVIORS:

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LOADER BEHAVIORS:

- LOADER MOVES TO POSITION FOR OBSERVATION

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DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER MOVES TO HULL DOWN FIRING POSITION
- DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT
- DRIVER BRAKES



JOB OBJECTIVE NO. 239 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <2300 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE  
TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 240 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: LAV OR CRENSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:  
 TC ANNOUNCES "CALIBER FIFTY"  
 TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
 TC ANNOUNCES "DRIVER, STOP"  
 TC ESTIMATES RANGE  
 TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
 TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
 TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

\*\*\*\*\* LOADER MOVES TO POSITION FOR OBSERVATION \*\*\*\*\*

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
 DRIVER MANEUVERS TANK FOR FIRING  
 DRIVER MOVES TO HULL DOWN FIRING POSITION  
 DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
 DRIVER BRAKES



JOB OBJECTIVE NO. 241    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: LAV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
   TC FIRES CALIBER FIFTY  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES

JOB OBJECTIVE NO. 242 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <2300 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
TC ESTIMATES RANGE  
TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 243    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: AIRCRAFT  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <2300 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
 TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
 TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
 TC ESTIMATES RANGE  
 TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
 TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
 TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 244 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE  
TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 245    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION

TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE

TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS

TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES

JOB OBJECTIVE NO. 246    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: LAV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC ESTIMATES RANGE  
   TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
   TC FIRES CALIBER FIFTY  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 247 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: LAV OR CREWSERVED WEAPON

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"

TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION

TC ESTIMATES RANGE

TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY

TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS

TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 248    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: LAV  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC ESTIMATES RANGE  
   TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
   TC FIRES CALIBER FIFTY  
 GUNNER BEHAVIORS:  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 249    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: LAV  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC ESTIMATES RANGE  
   TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
   TC FIRES CALIBER FIFTY  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 250 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TO A HALT TARGET MOTION: STATIONARY TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE TARGET RANGE: <2300 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 251    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: AIRCRAFT  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <2300 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
   TC ANNOUNCES "DRIVER, STOP"  
   TC ESTIMATES RANGE  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
   TC FIRES CALIBER FIFTY  
 GUNNER BEHAVIORS:  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER MOVES TO HULL DOWN FIRING POSITION  
   DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
   DRIVER BRAKES

JOB OBJECTIVE NO. 252    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: LAV  
TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC ANNOUNCES "DRIVER, STOP"  
TC ESTIMATES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER MOVES TO HULL DOWN FIRING POSITION  
DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT  
DRIVER BRAKES



JOB OBJECTIVE NO. 253    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TO A HALT    TARGET MOTION: MOVING    TARGET TYPE: LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"

TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION

TC ANNOUNCES "DRIVER, STOP"

TC ESTIMATES RANGE

TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION

TC LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY

TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS

TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER MOVES TO HULL DOWN FIRING POSITION

DRIVER BRINGS TANK TO A SMOOTH GRADUAL HALT

DRIVER BRAKES

JOB OBJECTIVE NO. 254    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: LAV OR CREWSERVED WEAPON  
TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC ESTIMATES RANGE  
TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 255    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: LAV OR CREWSERVED WEAPON  
 TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION    TARGET RANGE: <1600 METERS    DAY/NIGHT: NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC ESTIMATES RANGE  
   TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
   TC FIRES CALIBER FIFTY  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES  
 \*\*\*\*\*

JOB OBJECTIVE NO. 256    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: STATIONARY    TARGET TYPE: AIRCRAFT  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <2300 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
   TC ESTIMATES RANGE  
   TC LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
   TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
   TC FIRES CALIBER FIFTY  
 GUNNER BEHAVIORS:  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 257 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING

TARGET MOTION: MOVING

TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <2300 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
TC ESTIMATES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED  
DRIVER MANEUVERS TANK FOR FIRING  
DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 258    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: MOVING    TARGET MOTION: MOVING    TARGET TYPE: AIRCRAFT  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <2300 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
   TC ESTIMATES RANGE  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
   TC FIRES CALIBER FIFTY  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER MAINTAINS STEADY RATE OF SPEED  
   DRIVER MANEUVERS TANK FOR FIRING  
   DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



JOB OBJECTIVE NO. 259    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: STATIONARY    TARGET TYPE: TROOPS  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <1600 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC ESTIMATES RANGE  
   TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY  
   TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS  
   TC FIRES CALIBER FIFTY  
 GUNNER BEHAVIORS:  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES

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JOB OBJECTIVE NO. 260      CREW MEMBER: TANK COMMANDER      WEAPON: CAL. 50      FIRING MODE: NON-PRECISION
VEHICLE MOTION: STATIONARY      TARGET MOTION: STATIONARY      TARGET TYPE: TROOPS
TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION      TARGET RANGE: <1600 METERS      DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY      AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:
TC ANNOUNCES "CALIBER FIFTY"
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
TC ESTIMATES RANGE
TC LAYS RANGELINE AT CENTER OF TARGET VULNERABILITY
TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:
LOADER BEHAVIORS:
LOADER MOVE. TO POSITION FOR OBSERVATION
DRIVER BEHAVIORS:
DRIVER BRAKES

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JOB OBJECTIVE NO. 261    CREW MEMBER: TANK COMMANDER    WEAPON: CAL. 50    FIRING MODE: NON-PRECISION  
 VEHICLE MOTION: STATIONARY    TARGET MOTION: MOVING    TARGET TYPE: AIRCRAFT  
 TARGET VISIBILITY: VISIBLE    TARGET RANGE: <2300 METERS    DAY/NIGHT: DAY OR NIGHT  
 FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY    AMMUNITION: CAL. 50  
 TANK COMMANDER BEHAVIORS:  
   TC ANNOUNCES "CALIBER FIFTY"  
   TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
   TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
   TC ESTIMATES RANGE  
   TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
   TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
   TC FIRES CALIBER FIFTY  
 \*\*\*\*\*  
 GUNNER BEHAVIORS:  
 \*\*\*\*\*  
 LOADER BEHAVIORS:  
   LOADER MOVES TO POSITION FOR OBSERVATION  
 \*\*\*\*\*  
 DRIVER BEHAVIORS:  
   DRIVER BRAKES  
 \*\*\*\*\*

JOB OBJECTIVE NO. 262 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: AIRCRAFT

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <2300 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC PLACES CALIBER FIFTY SELECTOR IN HIGH RATE OF FIRE POSITION  
TC ESTIMATES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC FIRES CONTINUOUS BURST AT AIRCRAFT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 263 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: LAV

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"  
TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION  
TC ESTIMATES RANGE  
TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION  
TC LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY  
TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS  
TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES

JOB OBJECTIVE NO. 264 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: STATIONARY TARGET MOTION: MOVING TARGET TYPE: LAV

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: 1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "CALIBER FIFTY"
- TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
- TC ESTIMATES RANGE
- TC APPLIES LEAD IN DIRECTION OF TARGET APPARENT MOTION
- TC LAYS RANGELINE LEADLINE AT CENTER OF TARGET VULNERABILITY
- TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR POINT TARGETS
- TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER BRAKES



JOB OBJECTIVE NO. 265 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE TARGET RANGE: <1600 METERS DAY/NIGHT: DAY OR NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

- TC ANNOUNCES "CALIBER FIFTY"
- TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION
- TC ESTIMATES RANGE
- TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS
- TC LAYS M85 FOR DIRECTION ON EDGE OF TARGET
- TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

- LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

- DRIVER MAINTAINS STEADY RATE OF SPEED
- DRIVER MANEUVERS TANK FOR FIRING
- DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS

JOB OBJECTIVE NO. 266 CREW MEMBER: TANK COMMANDER WEAPON: CAL. 50 FIRING MODE: NON-PRECISION

VEHICLE MOTION: MOVING TARGET MOTION: STATIONARY TARGET TYPE: TROOPS

TARGET VISIBILITY: VISIBLE USING ART. ILLUMINATION TARGET RANGE: <1600 METERS DAY/NIGHT: NIGHT

FIRE CONTROL INSTRUMENT: TC'S PERISCOPE DAY AMMUNITION: CAL. 50

TANK COMMANDER BEHAVIORS:

TC ANNOUNCES "CALIBER FIFTY"

TC PLACES CALIBER FIFTY SAFETY IN FIRE POSITION

TC ESTIMATES RANGE

TC ADJUST CALIBER FIFTY MACHINEGUN BURST FOR AREA TARGETS

TC LAYS M85 FOR DIRECTION ON EDGE OF TARGET

TC FIRES CALIBER FIFTY

GUNNER BEHAVIORS:

LOADER BEHAVIORS:

LOADER MOVES TO POSITION FOR OBSERVATION

DRIVER BEHAVIORS:

DRIVER MAINTAINS STEADY RATE OF SPEED

DRIVER MANEUVERS TANK FOR FIRING

DRIVER ANNOUNCES ADVERSE TERRAIN CONDITIONS



## APPENDIX B

### GENERALIZABILITY AND ELEMENT-COVERAGE ALGORITHMS

This appendix presents two computing algorithms. The first accomplishes the generalizability computations described in the text and by Wheaton et al. The generalizability index is a weighted sum of the 112 behavioral element values vis à vis each job objective: each element assumes a value of "1" if it is present in the objective, and a "0" otherwise. The weights applied to each element in order to generate the weighted sum vary from cluster to cluster. Each element is weighted by the square of the frequency with which it occurs across all objectives in the cluster of interest, represented as " $F^2$ ", and inversely weighted by the frequency with which it occurs across the entire domain of job objectives, represented as " $D$ ". Thus, the weighted index is also referred to as " $F^2/D$ " (see Wheaton et al. for the justification for this index).

The second algorithm is designed to examine the extent to which a selected sample of job objectives covers all 112 behavioral elements, and, further, the extent to which the frequency of occurrence of each element in the sample is consistent with its frequency in the domain. This kind of information is useful, for example, for determining the goodness of fit between a sample of test or training exercises and the entire job domain.

## ALGORITHM 1---GENERALIZABILITY

### INPUT ARRAYS

Let  $\underline{X} = [x_{ij}]$  be the job objective-behavioral element matrix, arranged so that objectives in the same cluster are contiguous.  $\underline{X}$  has  $I$  rows, corresponding to job objectives; in the present case  $I = 266$ .  $\underline{X}$  has  $J$  columns corresponding to behavioral elements; in the present case  $J = 112$ .

Let  $\underline{C} [c_k]$  be a  $K$ -by-1 vector containing the number of job objectives in each of the  $K$  clusters. In the present case  $K = 16$ . The entries in  $\underline{C}$  are ordered consistently with the order of clusters in  $\underline{X}$ . The values of each  $c_k$  for the present case may be computed from data in Table A-1.

### WORKING ARRAYS

Let  $\underline{D} = [d_j]$  be a  $J$ -by-1 vector containing the frequency with which each of the  $J$  behavioral elements occurs across the entire set (or domain) of job objectives.

Let  $\underline{F} = [f_{kj}]$  be a  $K$ -by- $J$  matrix containing the frequency with which each of the  $J$  behavioral elements occurs within each of the  $K$  clusters of job objectives.

Let  $\underline{W} = [w_{kj}]$  be a  $K$ -by- $J$  matrix which contains the generalizability weight for each element in each cluster.

### OUTPUT ARRAYS

Let  $\underline{G} = [g_i]$  be an  $I$ -by-1 vector containing generalizability index values for each of the  $I$  job objectives.

### OPTIONS

Let  $\underline{R} = [r_i]$  be an  $I$ -by-1 vector containing the rank of the generalizability index value for the  $i$ th job objective, ranking being performed independently within each cluster.

Let  $\underline{Z} = [z_i]$  be an  $I$ -by-1 vector containing the standardized generalizability index value for the  $i$ th job objective, standardization being performed within each cluster using the within-cluster mean and standard deviation for the  $g_i$ 's in that cluster.



## POINTERS AND INDEX VARIABLES

- i ranges from 1 to I across the I job objectives (e.g. rows of X).
- j ranges from 1 to J across the J behavioral elements (e.g. columns of X).
- k ranges from 1 to K across the K clusters (e.g. rows of F).
- LL "lower limit" pointer, used to indicate the lowest job objective in a given cluster.
- UL "upper limit" pointer, used to indicate the highest job objective in a given cluster.

# COMPUTING ALGORITHM NO. 1

Step 1.) For j := 1 to J,

$$d_j := \sum_{i=1}^I x_{ij}.$$

Step 2.) Comment: d vector is now computed.

Step 3.) LL := 1.

Step 4.) UL := c<sub>1</sub>.

Step 5.) Comment: LL and UL define the lower and upper limits of Cluster 1.

Step 6.) k := 1.

Step 7.) For j := 1 to J,

$$f_{kj} := \sum_{i=LL}^{UL} x_{ij},$$

$$w_{kj} := (f_{kj} ** 2) / d_j.$$

Step 8.) If k = K GO TO Step 14.

Step 9.) LL := LL + c<sub>k</sub>.

Step 10.) k := k + 1.

Step 11.) UL := UL + c<sub>k</sub>.

Step 12.) Comment: LL and UL define the lower and upper limits of Cluster k.

Step 13.) GO TO Step 7.

Step 14.) k := 1.

Step 15.) i := 1.

Step 16.) UL := c<sub>k</sub>.



Step 17.)  $g_i := \sum_{j=1}^J (x_{ij} * w_{kj}).$

Step 18.)  $i := i + 1.$

Step 19.) If  $i$  GT  $I$  GO TO Step 24.

Step 20.) If  $i$  LE  $UL$  GO TO Step 17.

Step 21.)  $k := k + 1.$

Step 22.)  $UL := UL + c_k.$

Step 23.) GO TO Step 17.

Step 24.) Output  $\underline{G} = [g_i].$

#### Optional

Step 25.)  $LL := 1.$

Step 26.)  $k := 1.$

Step 27.) Execute Algorithm RANK (  $\underline{G}(LL)$ ,  $c_k$ ,  $\underline{R}(LL)$  ).

Step 28.) Comment: Algorithm RANK ranks  $c_k$  values beginning in address  $\underline{G}(LL)$ , and places the ranks in array  $\underline{R}$  beginning at address  $LL$ .

Step 29.) Execute Algorithm STANDARD (  $\underline{G}(LL)$ ,  $c_k$ ,  $\underline{Z}(LL)$  ).

Step 30.) Algorithm STANDARD computes standard score values for the  $c_k$  scores beginning in address  $\underline{G}(LL)$ , and places them in array  $\underline{Z}$  beginning at address  $LL$ .

Step 31.)  $k := k + 1.$

Step 32.) If  $k$  GT  $K$  GO TO Step 35.

Step 33.)  $LL := LL + c_{(k-1)} + 1.$

Step 34.) GO TO Step 27.

Step 35.) Output  $\underline{R} = [r_i].$

Step 36.) Output  $\underline{Z} = [z_i].$

Step 37.) STOP

## ALGORITHM 2---ELEMENT COVERAGE

### INPUT ARRAYS

Let  $\underline{X} = [x_{ij}]$  be the job objective-behavioral element matrix.  $\underline{X}$  has  $I$  rows, corresponding to job objectives; in the present case,  $I = 266$ .  $\underline{X}$  has  $J$  columns corresponding to behavioral elements; in the present case,  $J = 112$ .

Let  $\underline{S} = [s_n]$  be an  $N$ -by-1 vector listing the job objectives in the sample to be analysed. Each entry in  $\underline{S}$  is a row number in the matrix  $\underline{X}$  that corresponds to a job objective included in the sample.

### WORKING ARRAYS

Let  $\underline{D} = [d_j]$  be a  $J$ -by-1 vector containing the frequency with which each of the  $J$  behavioral elements occurs across the entire domain of job objectives.

Let  $\underline{F} = [f_j]$  be a  $J$ -by-1 vector containing the frequency with which each of the  $J$  behavioral elements occurs within the sample of objectives to be evaluated.

Let  $\underline{D}' = [d'_j]$  be a  $J$ -by-1 vector which indicates which elements occur at least once across all job objectives in the domain, that is, if  $d_j$  is greater than or equal to 1, then  $d'_j$  equals 1; otherwise  $d'_j$  equals 0.

Let  $\underline{F}' = [f'_j]$  be a  $J$ -by-1 vector which indicates which elements occur at least once in the sample of job objectives being analysed. Thus,  $f'_j$  equals 1 when  $f_j$  is at least 1, and  $f'_j$  is 0 otherwise.

### OUTPUT STATISTICS

Let PROP be the proportion of behavioral elements which occur in the domain ( $\underline{X}$ ) and also in the sample.

Let CHISQ be a measure of goodness-of-fit between the frequency with which an element occurs in the domain and in the sample. CHISQ will be distributed as chi-square under a null hypothesis that the frequencies in the domain and sample are perfectly associated; it will have 111 degrees of freedom (DF in the algorithm) in the present case ( $J-1$ ), since all  $J$  elements occur at least once in the domain. CHISQ may be tested for significance ("poorness of fit").



Let PHIMAX be a measure of correlation between the frequency with which an element occurs in the domain and in the sample. It is derived directly from CHISQ.

#### POINTERS

- i ranges from 1 to I across the I job objectives (e.g. rows of X).
- j ranges from 1 to J across the J behavioral elements (e.g. columns of X).
- n ranges from 1 to N across the N job objectives in the sample (e.g. rows of S).

# COMPUTING ALGORITHM NO. 2

- Step 1.) For  $j := 1$  to  $J$ ,  

$$d_j := \sum_{i=1}^I x_{ij}.$$
- Step 2.) Comment:  $\underline{D}$  vector is now computed.
- Step 3.) For  $j := 1$  to  $J$ ,  

$$f_j := \sum_{n=1}^N x_{nj}.$$
- Step 4.) Comment:  $\underline{F}$  vector is now computed.
- Step 5.) For  $j := 1$  to  $J$ , execute Steps 6 and 7.
- Step 6.) If  $d_j \geq 1$   $d'_j := 1$  ELSE  $d'_j := 0$ .
- Step 7.) If  $f_j \geq 1$   $f'_j := 1$  ELSE  $f'_j := 0$ .
- Step 8.)  

$$\text{PROP} := \left[ \sum_{j=1}^J (d'_j * f'_j) \right] / \sum_{j=1}^J d'_j.$$
- Step 9.) For  $j := 1$  to  $J$ ,  

$$d_j := d_j * (N/J).$$
- Step 10.)  

$$\text{CHISQ} := \sum_{j=1}^J [(f_j - d_j)^2 / d_j], \text{ for } d_j \neq 0.$$
- Step 11.)  

$$\text{DF} := \sum_{j=1}^J d'_j - 1.$$
- Step 12.)  

$$\text{PHIMAX} := \text{SQRT} [ \text{CHISQ} / ( \sum_{j=1}^J f_j ) / (\text{DF}) ].$$
- Step 13.) OUTPUT PROP, CHISQ, DF, PHIMAX.
- Step 14.) STOP



## APPENDIX C

### PROGRAM LISTING

This appendix contains a listing of the program developed jointly by the project staff and the U.S. Army Research Institute for the Social and Behavioral Sciences. This program accomplishes the many of the computations described in Appendix B, as well as several others. This program was written for a small CDC 3300 computer, and thus makes use of two intermediate storage units (1 and 2). The card reader or other input stream device is unit 60, and the output device (line printer) is unit 61. The program as it stands will handle up to 322 job objectives and 124 behavioral elements.

For those wishing to convert this program to their own system, please note the following non-standard usages:

- 1) DECODE and ENCODE statements are used to convert from character to numeric form and vice versa.
- 2) Hollerith constants (e.g. "4HEND ") are used in assignment statements. Other usages which are not universally supported include the use of the "PRINT" statement, and the use of integer expressions as array subscripts.

```

PROGRAM OSPL
C*****
C NOTATION - THE DATA BASE CONSISTS OF 392 RECORDS CALLED TASKS OR OBJECTIVES.
C EACH OBJECTIVE CONSISTS OF 124 ITEMS CALLED ELEMENTS. EACH OF WHICH IS
C REPRESENTED BY A ONE-DIGIT NUMBER. THE FIRST 11 ELEMENTS OF EACH RECORD ARE
C THE OBJECTIVE CODES.
C THIS PROGRAM CONSISTS OF THREE PARTS. THE FIRST TWO ARE RELATED AND THE
C THIRD IS RUN AFTER THE RESULTS OF THE FIRST TWO ARE ANALYZED. THE FIRST PART
C CALCULATES THE TOTAL NUMBER OF APPEARANCES OF EACH ELEMENT FOR THOSE
C OBJECTIVES CHOSEN FOR ANALYSIS (IF) AND SUCH NUMBER FOR THE WHOLE DATA BASE (N).
C THE SECOND PART COMPUTES THE 7-Scores FOR EACH OBJECTIVE CHOSEN TO BE
C ANALYZED AND THEIR ORDERING W/R/T Z-SCORES. PRINTED ARE THE OBJECTIVE
C NUMBER, TOTAL SUMS OF F/D, TOTAL SUMS OF F&F/D, Z-SCORE, RANK AND THE
C MNEMONICS OF THE OBJECTIVE CODES.
C THE THIRD PART COMPUTES VARIOUS PERCENTAGES OF APPEARANCES OF EACH
C ELEMENT FOR THE OBJECTIVES (SAMPLE OBJECTIVES) TAKEN FROM ANOTHER SET OF
C OBJECTIVES (POPULATION OBJECTIVES) INSTEAD OF THOSE FROM THE WHOLE DATA BASE.
C (POPULATION OBJECTIVES) INSTEAD OF THOSE FROM THE WHOLE DATA BASE.
C (1.2) MEANS PARTS 1 AND 2.
C*****
C THIS PROGRAM WAS WRITTEN BY KAI K. DAI IN DEC. 1976.
C*****
C THE FOLLOWING EXPLAINS THE ARRAY VARIABLES USED IN THIS PROGRAM
C D - (1.2) - NO. OF APPEARANCES OF EACH ELEMENT IN THE WHOLE DATA BASE.
C ELTMN - (1.2) - EQUIVALENT TO SORT1 AND PART OF STORE.
C F - (1.2) - NO. OF APPEARANCES OF EACH ELEMENT IN OBJECTIVES CHOSEN
C FOR ANALYSIS.
C ILIST - (1.2) - THE LIST OF OBJECTIVES WITH SPECIAL CODES TO BE ANALYZED.
C ISTORE - (1.2) - FIRST 113 WORDS ARE FOR THE I/O TEMPORARY STORAGE OF
C OUTPUT TO FILE 2 CONTAINING OBJECTIVES TO BE ANALYZED
C AND 120TH-220TH ARE FOR THE OBJECTIVE CODE DESCRIPTION.
C (3) - ELEMENTS AND THEIR SPECIAL CODES.
C ITITLE - CARD INPUT FOR (1.2.3).
C JLIST - (1.2) - TEMPORARY STORAGE FOR THE OBJECTIVE CODES.
C (3) - THE LIST OF SAMPLE OBJECTIVES TO BE ANALYZED.
C OBJCD - THE 11 OBJECTIVE CODES FOR (1.2.3).
C OBJMN - (1.2) - MNEMONICS OF EACH OBJECTIVE CODE.
C (3) - UNUSED.
C SORT - (1.2) - WORK AREA FOR SORTING THE Z-SCORES.
C (3) - PART OF ELTMN.
C SORT1 - (1.2) - NUMERICAL ORDER OF Z-SCORES.
C POP - (1.2) - UNUSED.
C (3) - TRUE=POPULATION OBJECTIVES ALREADY READ.
C FALSE=POPULATION OBJECTIVES NOT YET READ.
C PRT - (1.2) - TEMPORARY STORAGE FOR SUM OF F/D AND SUM OF F&F/D.

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(3) - TEMPORARY STORAGE FOR VARIOUS PERCENTAGFS OF F(S)-F(P).

PRST - (1+2) - SUM OF F/D AND SUM OF F\*F/D.

(3) - TOTAL SUM OF F(S) AND TOTAL SUM OF F(P).

STORE - (1+2) - INPUT FROM DATA BASE.

(3) - EQUIVALENT TO PART OF ELTNN.

.....

DIMENSION ITITLE(20),STORE(322),ILIST(967),D(114),F(114)

DIMENSION ISTORE(342),SORT(323),SORT1(323)

DIMENSION PRST(966),PRT(7),JLIST(322), ELTNN(940)

INTEGER OBJCD(11)

EQUIVALENCE (ELTNN(1),SORT(1)),(ELTNN(324),SORT1(1))

EQUIVALENCE (ELTNN(447),STORE(1))

EQUIVALENCE (OBJNN(1),ISTORE(120))

INTEGER OBJNN(100)

LOGICAL POP

DATA IRLANK/4H /

DATA ICODE/4H /

PRINT 8005

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C*****
IN 0100 C
IN 0110 C GET MNEMONICS OF EACH OBJECTIVE AND STORE IN OBJMN.
IN 0111 C FORMAT - 1ST 4 COLS - MNEMONICS FOR [1]
IN 0112 C 2ND 4 COLS - MNEMONICS FOR [2]
IN 0113 C 3RD 4 COLS - MNEMONICS FOR [3]
IN 0114 C
IN 0115 C
IN 0116 C
IN 0117 C 10TH 4 COLS - MNEMONICS FOR [10].
IN 0118 C
IN 0119 C
C*****
IN 0120 1005 I=K+9
IN 0121 READ(60,6003) (OBJMNM(I),I=K,L)
IN 0122 IF (IEOF(60).EQ.-1) GO TO 9998
IN 0123 K=K+10
IN 0124 J=J+1
IN 0125 IF (J.EQ.11) GO TO 1007
IN 0126 GO TO 1005
IN 0127 C*****
IN 0128 C PARTS 1 AND 2 START HERE.
IN 0129 C CONTROL CARD FORMAT -
IN 0130 C
IN 0131 C C C C C C
IN 0132 C C C C C C
IN 0133 C C C C C C
IN 0134 C L L L L L
IN 0135 C 1 4 8 1 2
IN 0136 C
IN 0137 C TITLE (ANY 60 ALPHA CHARACTERS)
IN 0138 C OBJECTIVES
IN 0139 C DATA CARDS - ONE OF THE FOLLOWING 2:
IN 0140 C DOMAIN(ALL OBJECTIVES IN THE DATA BASE WITH NO SPECIAL CODES) OR
IN 0141 C 1ST-4TH COLS-OBJECTIVE NUMBER AND FROM 5TH COL-OBJECTIVE SPECIAL CODE
IN 0142 C END
IN 0143 C
C*****
IN 0144 1007 READ(60,1100) (ITITLE(I),I=1,20)
IN 0145 IF (ITITLE(1).EQ.4HEND .AND.ITITLE(2).EQ.4HOF 0.AND.ITITLE(3).EQ.4
IN 0146 HMRJEC) GO TO 1
IN 0147 GO TO 9998
IN 0148 1 I=1
IN 0149 NO 2 I=1.LIM
IN 0150 N(I)=0.0
IN 0151 F(I)=0.0
IN 0152 2 READ(60,1100) (ITITLE(I),I=1,20)
IN 0153 1100 FORMAT (20A4)
IN 0154 IF (IEOF(60).EQ.-1) GO TO 43
IN 0155 IF (ITITLE(1).NE.4HTITLE) GO TO 9004
IN 0156 WRITE (61,2000) (ITITLE(I),I=1,20)
IN 0157 2000 FORMAT(1H ,20A4)
IN 0158 READ (60,1100) (ITITLE(I),I=1,20)
IN 0159 WRITE (61,2000) (ITITLE(I),I=1,20)
IN 0160 IF (ITITLE(1).NE.4HOBUE.OR.ITITLE(2).NE.4HCTIV) GO TO 9000
IN 0161 IF (ITITLE(3).NE.4HES 1 GO TO 18
IN 0162

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IN 0163      2001 READ(60,1100) (ITITLE(I),I=1,20)
IN 0164      WRITE(61,2000) (ITITLE(I),I=1,20)
IN 0165      IF (ITITLE(1).EQ.4NDOMA) GO TO 3
IN 0166      IF (ITITLE(1).EQ.4HEND) GO TO 4
IN 0167      IF (ITITLE(1).EQ.4HEND) GO TO 4
IN 0168      IF (ITITLE(1).EQ.4HEND) GO TO 4
IN 0169      DECODE(80,3002,ITITLE) (ILIST(K),K=1,12)
IN 0170      2002 FORMAT(20A4)
IN 0171      3002 FORMAT(14,2A4,6BX)
IN 0172      IF (ITITLE(1).EQ.967) GO TO 4
IN 0173      IF (ITITLE(1).EQ.967) GO TO 4
IN 0174      GO TO 2001
IN 0175      3 READ (60,1100) (ITITLE(I),I=1,20)
IN 0176      IF (ITITLE(1).EQ.4HEND) GO TO 3
IN 0177      WRITE (61,2000) (ITITLE(I),I=1,20)
IN 0178      IF (ITITLE(1).EQ.4HEND) GO TO 3
IN 0179      4 ILIST(1)=9999
IN 0180      K=1
IN 0181      SN1=0.0
IN 0182      C *****
IN 0183      C GET DATA AND STORE FOR EACH ELEMENT THE SUM OF D IN D AND THE SUM OF F IN F
IN 0184      C THEN WRITE THE DESIRED OBJECTIVES ON FTLF 2.
IN 0185      C *****
IN 0186      C *****
IN 0187      5 READ (1,5000) (OBJCD(J),J=1,11), (STORF(I),I=1,LIM)
IN 0188      5000 FORMAT(11I1, 11A1,0)
IN 0189      IF (ITITLE(1).EQ.4HEND) GO TO 11
IN 0190      NO 6 J=1,LIM
IN 0191      6 D(J)=STORE(J)+OBJCD(J)
IN 0192      NO 7 I=1,964,3
IN 0193      IF (K.EQ.ILIST(I)) GO TO 8
IN 0194      IF (ILIST(I).EQ.9999) GO TO 10
IN 0195      7 CONTINUE
IN 0196      8 NO 5400 M1=1,LIM
IN 0197      5400 YSTORE(M1)=STORE(M1)
IN 0198      WRITE (2,5500) K,(OBJCD(J),J=1,11), (STORF(I),I=1,LIM)
IN 0199      5500 FORMAT(14,11I1, 11A1)
IN 0200      6000 FORMAT(14,11I1, 11A1,0)
IN 0201      6001 FORMAT (F3.0,1X,7A8,20X)
IN 0202      6003 FORMAT(10A4,40A)
IN 0203      SN1=SN1+1.0
IN 0204      NO 9 J=1,LIM
IN 0205      9 F(J)=STORE(J)+F(J)
IN 0206      10 K=K+1
IN 0207      GO TO 5
IN 0208      11 REWIND 1
IN 0209      FMTFILE 2
IN 0210      C *****
IN 0211      C *****
IN 0212      C COMPUTE FOR EACH ELEMENT F/D AND F*F/D AND SAVE IN PRIST. THERE ARE 3 REAL-
IN 0213      C WORDS FOR EACH ELEMENT, 1ST BEING F/D, 2ND F*F/D, AND 3RD TOTAL SUM OF F*F/D.
IN 0214      C *****
IN 0215      C *****
IN 0216      I=1

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IN 0217      NO 13 J=1,LIM
IN 0218      PRST(L)=F(J)/U(J)
IN 0219      PRST(L+1)=F(J)*F(J)/D(J)
IN 0220      13 I=1,3
IN 0221      REWIND 2
IN 0222      PRINT 6500
IN 0223      6500 FORMAT(1H).53H ELEMENT      F      D      F/D      FF/D
IN 0224      U      )
IN 0225      K=0
IN 0226      I SUM=0
IN 0227      C SKIP THOSE ELEMENTS WITH SUM OF F EQUAL TO 0.
IN 0228      NO 14 I=1,LIM
IN 0229      IF (F(I).EQ.0.0) GO TO 14
IN 0230      WRITE (61,6600) I,F(I),D(I),PRST(30*K+1),PRST(30*K+2)
IN 0231      6600 FORMAT(4X,I4,4(4X,F6.2))
IN 0232      I SUM=SUM+I
IN 0233      14 K=K+1
IN 0234      PRINT 6650
IN 0235      6650 FORMAT(54H -----)
IN 0236      WRITE (61,6700) LSUM
IN 0237      6700 FORMAT(1H).37H TOTAL NUMBER OF ELEMENTS INVOLVED - ,13)
IN 0238      PRINT 6750
IN 0239      6750 FORMAT(1H).81H OBJECTS      SUM OF F/D      SUM OF FF/D      Z-SCORE      RA
IN 0240      NNK      CODE      DESCRIPTION)
IN 0241      SUMX=0.0
IN 0242      SUMXX=0.0
IN 0243      JCNT=1
IN 0244      C -----
IN 0245      C COMPUTE THE SUM OF F*F/D FROM OBJECTIVES ON FILE 2. THE NUMERICAL ORDER OF
IN 0246      C ALL SUMS OF F*F/D IS THE SAME AS THAT OF THE CORRESPONDING Z-SCORES.
IN 0247      C -----
IN 0248      C -----
IN 0249      6752 READ (2,6000) K,(OBJCD(J),J=1,11),(STORE(I),I=1,LIM)
IN 0250      IF (I.EQ.0) GO TO 6760
IN 0251      PRST(4)=0.0
IN 0252      I=1
IN 0253      NO 6753 J=1,LIM
IN 0254      C COMPUTE THE TOTAL SUM OF F/D WITH RESPECT TO THE CORRESPONDING OBJECTIVE.
IN 0255      PRST(4)=STORE(J)*PRST(L+1)*PRST(4)
IN 0256      C -----
IN 0257      C -----
IN 0258      C SORT IS USED AS THE WORK AREA AND SORTING OUTPUT IS STORED IN SORT1.
IN 0259      C -----
IN 0260      C -----
IN 0261      6753 I=1,3
IN 0262      SORT(JCNT)=PRST(4)
IN 0263      LOCATE THE ELEMENT IN PRST.
IN 0264      K1=3*(JCNT-1)+3
IN 0265      PRST(K1)=PRST(4)
IN 0266      JCNT=JCNT+1
IN 0267      SUMX=SUMX+PRST(4)
IN 0268      SUMXX=SUMXX+PRST(4)*PRST(4)
IN 0269      GO TO 6752
IN 0270

```



```

IN 0271 6760 REWIND 2
IN 0272 SORT(JCNT)=1000000.0
IN 0273 C COMPUTE THE STANDARD DEVIATION.
IN 0274 S1=SQRT((SUMX*(SUMX**2)/SN1)/(SN1-1))
IN 0275 NO 6761 J=1.322
IN 0276 6761 SORT1(J)=0.0
IN 0277 K=1
IN 0278 C*****
IN 0279 C ORDER THE F*F/D OF ALL OBJECTIVES STORED IN PR1ST. THIS IN TURN RANKS
IN 0280 C THE 7-SCORES OF THOSE OBJECTIVES.
IN 0281 C
IN 0282 C*****
IN 0283 6762 J=1
IN 0284 6763 IF (SORT(J).EQ.1000000.0) GO TO 6765
IN 0285 6763 IF (SORT1(K).GE.SORT(J)) GO TO 6764
IN 0286 SORT1(K)=SORT(J)
IN 0287 JCOUNT=J
IN 0288 6764 J=J+1
IN 0289 GO TO 6763
IN 0290 6765 SORT(JCOUNT)=0.0
IN 0291 K=K+1
IN 0292 IF (SORT(K).EQ.1000000.0) GO TO 6766
IN 0293 GO TO 6762
IN 0294 6766 I=0
IN 0295 15 PR1(I)=0.0
IN 0296 PR1(2)=0.0
IN 0297 PR1(3)=0.0
IN 0298 C
IN 0299 C START PROCESSING THE OBJECTIVES DESIRED FOR ANALYSIS.
IN 0300 I=1
IN 0301 READ(2.6000) K,(OBJCD(J),J=1,11),(STARF(I),I=1,11M)
IN 0302 IF (I.FOF(2).EQ.-1) GO TO 7999
IN 0303 NO 16 J=1,L1M
IN 0304 C COMPUTE THE Z-SCORES.
IN 0305 PR1(I)=STORE(J)*PR1ST(I)+PR1(I)
IN 0306 16 I=I+1
IN 0307 PR1(3)=(PR1ST(3*L+3)-SUMX/SN1)/SX
IN 0308 NO 6767 ICOUNT=1.322
IN 0309 IF (PR1ST(3*L+3).NE.SORT1(ICOUNT)) GO TO 6767
IN 0310 TRANK=ICOUNT
IN 0311 GO TO 6768
IN 0312 6767 CONTINUE
IN 0313 C MOVE IN THE OBJECTIVE CODES STORED IN OBJCD.
IN 0314 6768 DECODE (4,6769,OBJCD) (JLIST(11),I11=1,11)
IN 0315 NO 17 I=1,11
IN 0316 IF (JLIST(I).EQ.0) JLIST(I)=10
IN 0317 17 CONTINUE
IN 0318 6769 FORMAT (11I4)
IN 0319 C LOCATE THE OBJECTIVE CODE MNEMONICS IN OBJMN.
IN 0320 NO 6770 LM=1,11
IN 0321 I111=JLIST(LM)*(LM-1)*10
IN 0322 6770 JLIST(LM)=OBJMN(I111)
IN 0323 C LOCATE THE OBJECTIVE SPECIAL CODE IN I1IST.
IN 0324 NO 6771 I=1.944*3

```

```

IN 0326 IF (K.EQ.ILIST(1)) GO TO 6773
IN 0327 6771 CONTINUE
IN 0328 6773 WRITE (61,6800) K,PR1(1),PR1ST(3),L(3),PR1(3),IRANK,ILIST(1),1.
IN 0329 ILIST(1)=2, (JLIST(11),11=1,11)
IN 0330 6800 FORMAT (4X,14,4X,F10.4,2X,F11.4,4X,F0.4,3X,13,3X,2A4,3X,11(A4,1X))
IN 0331 11=1
IN 0332 GO TO 15
IN 0333 C *****
IN 0334 C PART 3 STARTS HERE
IN 0335 C THE CONTROL CARDS FOR THIS PART ARE -
IN 0336 C TITLE,POP OBJ,POP OBJ DATA,SAMPLE OBJ DATA,CODES FOR THE ELIS,
IN 0337 C ELT CODE DATA(OPTIONAL),AND END CARDS WHICH HAVE THE THE FOLLOWING FORMAT -
IN 0338 C C C C C
IN 0339 C 0 0 0 0 0
IN 0340 C L L L L
IN 0341 C 1 4 R 1
IN 0342 C TITLE (ANY 60 ALPHA CHARACTERS)
IN 0343 C OBJECTIVES POPULATION
IN 0344 C DATA CARDS - ONE OF THE FOLLOWING 2
IN 0345 C DOMAIN(ALL OBJECTIVES IN THE DATA BASE WITH NO SPECIAL CODES) OR
IN 0346 C SPECIFY THE OBJ NO. IN EVERY FOUR COLS.
IN 0347 C OBJECTIVES SAMPLES
IN 0348 C DATA CARDS - SPECIFY OBJ NO. IN EVERY FOUR COLS.
IN 0349 C CONFS FOR THE ELEMENTS
IN 0350 C DATA CARDS -
IN 0351 C 1ST 4 COLS. FOR THE ELT NO. AND THE NEXT 8 COLS. FOR SPECIAL CODES.
IN 0352 C END
IN 0353 C WHEN DOMAIN IS USED BETWEEN THE OBJECTIVES POPULATION AND OBJECTIVES SAMPLES
IN 0354 C CARDS, THE WHOLE DATA BASE IS USED AS THE POPULATION OBJECTIVES FOR THE
IN 0355 C ANALYSIS. ALSO THE DATA CARDS FOR THE CONES OF THE ELEMENTS ARE NOT NEEDED
IN 0356 C FOR THE 2ND ANALYSIS WITHIN ONE RUN.
IN 0357 C *****
IN 0358 18 IF (ITITLE(3).NE.4HES P.AND.ITITLE(3).NE.4HES S) GO TO 9000
IN 0359 IF (ITITLE(3).NE.4HES S) GO TO 19
IN 0360 POP=.FALSE.
IN 0361 GO TO 21
IN 0362 19 POP=.TRUE.
IN 0363 11=1
IN 0364 20 READ(60,1100) (ITITLE(1),1=1,20)
IN 0365 WRITE (61,2000) (ITITLE(1),1=1,20)
IN 0366 IF (ITITLE(1).NE.4HNDOMA) GO TO 6850
IN 0367 NO 6840 1=1,322
IN 0368 6840 ILIST(1)=1
IN 0369 11=323
IN 0370 READ (60,1100) (ITITLE(1),1=1,20)
IN 0371 WRITE (61,2000) (ITITLE(1),1=1,20)
IN 0372 IF (ITITLE(3).EQ.4HES S) GO TO 21
IN 0373 GO TO 9998
IN 0374 6850 IF (ITITLE(3).EQ.4HES S) GO TO 21
IN 0375 IF (ITITLE(1).EQ.4HCODE) GO TO 24
IN 0376 12=11,19
IN 0377 DECODE (80,2002,ITITLE) (ILIST(K),K=1,12)
IN 0378

```



```

IN 0370      11=11.23
IN 0380      IF (11.EQ.323) GO TO 21
IN 0381      GO TO 20
IN 0382      21 IF (.NOT.POP) GO TO 22
IN 0383      ILIST(11)=9999
IN 0384      22 11=1
IN 0385      6900 READ (60,1100) (ITITLE(1),I=1,20)
IN 0386      WRITE (61,2000) (ITITLE(1),I=1,20)
IN 0387      IF (ITITLE(3).EQ.4HES P) GO TO 19
IN 0388      IF (ITITLE(1).EQ.4HCODE) GO TO 23
IN 0389      12=11.19
IN 0390      DECODE (60,2002,ITITLE) (JLIST(K),K=11,12)
IN 0391      11=11.20
IN 0392      IF (11.EQ.323) GO TO 6900
IN 0393      JLIST(11)=9999
IN 0394      IF (.NOT.POP) GO TO 19
IN 0395      GO TO 25
IN 0396      23 JLIST(11)=9999
IN 0397      GO TO 25
IN 0398      24 ILIST(11)=9999
IN 0399      C *****
IN 0400      C KKD = 1 MEANS THIS IS THE FIRST ANALYSIS.
IN 0401      C *****
IN 0402      25 IF (KKD.GT.1) GO TO 7000
IN 0403      DO 6901 I=1,342
IN 0404      6901 TSTORE(I)=IBLANK
IN 0405      7000 READ (60,1100) (ITITLE(1),I=1,20)
IN 0406      IF (IFEOF(60).EQ.-1) GO TO 9998
IN 0407      WRITE (61,2000) (ITITLE(1),I=1,20)
IN 0408      IF (ITITLE(1).EQ.4HEND) GO TO 7004
IN 0409      DECODE (4,7001,ITITLE) L
IN 0410      7001 FORMAT (I4)
IN 0411      C *****
IN 0412      C SAVE ELEMENT CODES IN ISTORE. THERE ARE 3 WORDS FOR EACH ELEMENT.
IN 0413      C 1ST BEING THE ELT NO. AND THE 2ND AND 3RD, THE CODE.
IN 0414      C *****
IN 0415      C *****
IN 0416      C *****
IN 0417      IL=3+(L-1)*1
IN 0418      TSTORE(1L)=L
IN 0419      IF (ITITLE(2).EQ.4H0000.AND.ITITLE(3).EQ.4H0000) PRIST(1L)=RMFFFF
IN 0420      FFFF
IN 0421      TSTORE(1L+1)=ITITLE(2)
IN 0422      TSTORE(1L+2)=ITITLE(3)
IN 0423      GO TO 7000
IN 0424      7004 DO 26 I=1,340
IN 0425      26 PRIST(I)=0.0
IN 0426      K=1
IN 0427      C N1 = POPULATION OBJECTIVES COUNT.
IN 0428      N1=0
IN 0429      C N2 = SAMPLE OBJECTIVES COUNT.
IN 0430      N2=0
IN 0431      J2=1
IN 0432      C *****

```

```

IN 0437 C
IN 0438 C   SAVE F(P) AND F(S) FOR EACH ELEMENT IN PRST.  THERE ARE 3 REAL WORDS
IN 0439 C   FOR EACH ELT.1ST BEING THE FLT NO.,THE 2ND F(P),AND 3RD,F(S).
IN 0440 C
IN 0441 C
IN 0442 C
IN 0443 C
IN 0444 C
IN 0445 C
IN 0446 C
IN 0447 C
IN 0448 C
IN 0449 C
IN 0450 C
IN 0451 C
IN 0452 C
IN 0453 C
IN 0454 C
IN 0455 C
IN 0456 C
IN 0457 C
IN 0458 C
IN 0459 C
IN 0460 C
IN 0461 C
IN 0462 C
IN 0463 C
IN 0464 C
IN 0465 C
IN 0466 C
IN 0467 C
IN 0468 C
IN 0469 C
IN 0470 C
IN 0471 C
IN 0472 C
IN 0473 C
IN 0474 C
IN 0475 C
IN 0476 C
IN 0477 C
IN 0478 C
IN 0479 C
IN 0480 C
IN 0481 C
IN 0482 C
IN 0483 C
IN 0484 C
IN 0485 C
IN 0486 C

C
C   READ THE DATA-BASE FILE.  CHECK IF THE OBJECTIVE FROM THE FILE IS THE ONE
C   DESIRED FOR ANALYSIS.  (ILIST CONTAINS POP. ORJS. JLIST CONTAINS POP. SAMPS.)
C
C*****
      READ(1,5000) (OBJCD(J),J=1,11),(F(I),I=1,11)
      IF (IFEOF(1).EQ.-1) GO TO 30
      DO 28 I=1,323
        IF (ILIST(I).EQ.9999) GO TO 29
        IF (ILIST(I).EQ.K) GO TO 7779
      7778 IF (JLIST(I).EQ.9999) POP=.TRUE.
        IF (POP) JLIST(I)=0
        IF (JLIST(I).EQ.K) GO TO 7781
        GO TO 28
      7779 J=1
      DO 7780 L3=1,LIM
        PRST(J,1)=PRST(J,1)+F(L3)
        J=J+3
      7780 N1=N1+1
        GO TO 7778
      7781 J=1
      DO 7782 L3=1,LIM
        PRST(J,2)=PRST(J,2)+F(L3)
        J=J+3
      7782 N2=N2+1
      28 CONTINUE
      29 K=K+1
      30 REWIND 1
C*****
C   PRINT HEADING.
C*****
      WRITE (61,7800) N1
      7800 FORMAT(1H,27HP-POPULATION OBJECTIVES - (N=,I3,1H))
      WRITE(61,7900) N2
      7900 FORMAT(1H,23HSAMPLE OBJECTIVES - (N=,I3,1H))
      PRINT 7901
      7901 FORMAT (12X,7HP-CENT,17X,3HP-POP,3X,3HSAM,10X,7HP-PCENT)
      PRINT 7902
      7902 FORMAT (5X,4HF(P),3X,7HOF F(P),2X,4HCODE,7X,4HELIS,2X,4HELIS,
      3X,4HF(S),2X,7HOF F(S),2X,16HPER OF F(S)-F(P),
      1710N)
C*****
C

```



```

IN 0487 C F(P) WAS STORED IN PRST(I*1).
IN 0488 C F(S) WAS STORED IN PRST(I*2).
IN 0489 C CONES FOR ELTS WERE STORED IN ISTORE.
IN 0490 C DESCRIPTIONS FOR ELTS WERE STORED IN EITMN.
IN 0491 C
IN 0492 C*****
IN 0493 S1=0.0
IN 0494 S2=0.0
IN 0495 DO 31 KS=1,7
IN 0496 31 PRST(KS)=0.0
IN 0497 S=RMFFFFFFF
IN 0498 DO 42 I=1,337.3
IN 0499 C*****
IN 0500 C
IN 0501 C SKIP THOSE WITH SPEC. CODE 00000000 AND THOSE WITH F(P)=0.
IN 0502 C
IN 0503 C*****
IN 0504 IF (PRST(I).EQ.S) GO TO 42
IN 0505 IF (PRST(I*1).EQ.0.0) GO TO 42
IN 0506 S1=S1+1.0
IN 0507 I3=I/3
IN 0508 C*****
IN 0509 C LOCATE THE ELEMENT POSITION IN EITMN.
IN 0510 C*****
IN 0511 MMIN=0.13+1
IN 0512 PRST=PRST(I)
IN 0513 DO 32 MMIN=1,337.3
IN 0514 IF (IPRST.EQ.ISTORE(MMIN)) GO TO 34
IN 0515 32 CONTINUE
IN 0516 34 SN1=N1
IN 0517 PERCE=PRST(I*1)/SN1*100.0
IN 0518 SN2=N2
IN 0519 PERCE2=PRST(I*2)/SN2*100.0
IN 0520 C PERCENTAGE OF F(S)-F(P) FOR EACH ELEMENT.
IN 0521 DIFF=PERCE2-PERCE1
IN 0522 IF (DIFF.LT.0.0) GO TO 7903
IN 0523 PRST(3)=PRST(3)+DIFF
IN 0524 PRST(1)=PRST(1)+DIFF
IN 0525 IF (ISTORE(MMIN*1).NE.1CODE) GO TO 7904
IN 0526 PRST(7)=PRST(7)+DIFF
IN 0527 PRST(5)=PRST(5)+DIFF
IN 0528 GO TO 7904
IN 0529 7903 PRST(2)=PRST(2)+DIFF
IN 0530 PRST(1)=PRST(1)-DIFF
IN 0531 C ALSO THE PERCENTAGES OF F(S)-F(P) FOR THOSE WITH SPECIAL CODE 1
IN 0532 IF (ISTORE(MMIN*1).NE.1CODE) GO TO 7904
IN 0533 PRST(6)=PRST(6)+DIFF
IN 0534 PRST(5)=PRST(5)-DIFF
IN 0535 7904 JPRST=PRST(I*1)
IN 0536 KPRST=PRST(I*2)
IN 0537 IF (KPRST.EQ.0) S2=S2+1.0
IN 0538 C LOCATE THE ELT POSITION IN ISTORE.
IN 0539 S2=S2+1.0
IN 0540 IF (PRST(I).EQ.EITMN(MMIN)) GO TO 41

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IN 0541 PRINT 7907
IN 0542 7907 FORMAT(25H,SOMETHING WRONG IN ELIMN)
IN 0543 GO TO 9998
IN 0544 41 IT=MMH+1
IN 0545 JS=IT+6
IN 0546 IPRTST=IPRTST
IN 0547 IF (KPRST.EQ.0) LPRST=0
IN 0548 WRITE (61,7909) JPRST,PERC1,ISTORE(MMH+1),ISTORE(MMH+2),IPRTST,
IN 0549 LIPRTST,KPRST,PERC2,DIFF,(ELIMN(J),J=1, IS)
IN 0550 7909 FORMAT (1H,*,X,14.5X, F5.1,2X,2A,4X,13.3X,14.4X, F5.1,X,
IN 0551 FF6.1,6X,7A8)
IN 0552 42 CONTINUE
IN 0553 C IF KKD IS GREATER THAN 1, THE PROGRAM WILL SAVE THE ELT DESC. AND CODES.
IN 0554 KKD=KKD+1
IN 0555 K1=S1
IN 0556 K2=S2
IN 0557 S3=S2/S1*100
IN 0558 C*****
IN 0559 C SUMMARY OF FINDINGS AND COMPUTATIONS.
IN 0560 C
IN 0561 C*****
IN 0562 WRITE (61,7911) K2,K1,S3
IN 0563 7911 FORMAT(1H0,3HPERCENTAGE OF SAMPLE IN POPULATION,1H(.14,2H)/.1H(,
IN 0564 114.2H) ,1H=F6.2)
IN 0565 WRITE (61,7912) PRT(1)
IN 0566 7912 FORMAT(1H0,48HABSOLUTE SUM OF ALL PERC OF F(S)-PERC OF F(P) - .
IN 0567 FF7.1)
IN 0568 WRITE (61,7915) PRT(2)
IN 0569 7915 FORMAT(1H0,49HNEGATIVE SUM OF PERC OF F(S)-PERC OF F(P) ONLY - .
IN 0570 FF7.1)
IN 0571 WRITE (61,7920) PRT(3)
IN 0572 7920 FORMAT(1H0,49HPOSITIVE SUM OF PERC OF F(S)-PERC OF F(P) ONLY - .
IN 0573 FF7.1)
IN 0574 WRITE (61,7921) PRT(5)
IN 0575 7921 FORMAT(1H0,63HABSOLUTE SUM OF ALL PERC OF F(S)-PERC OF F(P) WITH C
IN 0576 00DF OF 1 - ,F7.1)
IN 0577 WRITE (61,7925) PRT(6)
IN 0578 7925 FORMAT(1H0,64HNEGATIVE SUM OF PERC OF F(S)-PERC OF F(P) ONLY WITH
IN 0579 CCODE OF 1 - ,F7.1)
IN 0580 WRITE (61,7930) PRT(7)
IN 0581 7930 FORMAT(1H0,64HPOSITIVE SUM OF PERC OF F(S)-PERC OF F(P) ONLY WITH
IN 0582 CCODE OF 1 - ,F7.1)
IN 0583 GO TO 8001
IN 0584 7999 REWIND 2
IN 0585 8001 PRINT 6650
IN 0586 PRINT 8003
IN 0587 8003 FORMAT (1H0,19HEND OF THE ANALYSIS)
IN 0588 8005 PRINT #005
IN 0589 8005 FORMAT (1H1)
IN 0590 GO TO 1
IN 0591 9000 PRINT 9001
IN 0592 9001 FORMAT(27H YOU NEED AN OBJECTIVE CARD)
IN 0593 GO TO 9998
IN 0594

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IN 0594 9004 PRINT 9005
IN 0594 9005 FORMAT(14H NO TITLE CARD)
IN 0597 GO TO 9998
IN 0598 9996 PRINT 9997
IN 0599 9997 FORMAT(21H YOU NEED AN END CARD)
IN 0600 9998 PRINT 9999
IN 0601 9999 FORMAT(20H PROGRAM TERMINATING)
IN 0602 43 STOP
IN 0603 END

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ANST FORTRAN DIAGNOSTIC RESULTS FOR OSRL

NO ERRORS

TABLE D-1

Gross-Reference from Wheaton et al. (1978)  
Job-Objective-Numbers to those used  
in Appendix A

Wheaton et al. Number	Appendix A Number	Wheaton et al. Number	Appendix A Number
1	29	47	48
2	30	48	49
3	31	49	50
4	32	50	51
5	33	51	52
6	34	52	53
7	35	53	54
8	36	54	55
9	37	55	56
10	38	56	57
11	39	57	58
12	40	58	59
13	41	59	60
14	42	60	61
15	43	61	62
16	44	62	63
17	45	63	64
18	46	64	65
19	47	65	66
20	48	66	67
21	49	67	68
22	50	68	69
23	51	69	70
24	52	70	71
25	53	71	72
26	54	72	73
27	55	73	74
28	56	74	75
29	57	75	76
30	58	76	77
31	59	77	78
32	60	78	79
33	61	79	80
34	62	80	81
35	63	81	82
36	64	82	83
37	65	83	84
38	66	84	85
39	67	85	86
40	68	86	87
41	69	87	88
42	70	88	89
43	71	89	90
44	72	90	91
45	73	91	92
46	74	92	93
47	75	93	94
48	76	94	95
49	77	95	96
50	78	96	97
51	79	97	98
52	80	98	99
53	81	99	100
54	82	100	101
55	83	101	102
56	84	102	103
57	85	103	104
58	86	104	105
59	87	105	106
60	88	106	107
61	89	107	108
62	90	108	109
63	91	109	110
64	92	110	111
65	93	111	112
66	94	112	113
67	95	113	114
68	96	114	115
69	97	115	116
70	98	116	117
71	99	117	118
72	100	118	119
73	101	119	120
74	102	120	121
75	103	121	122
76	104	122	123
77	105	123	124
78	106	124	125
79	107	125	126
80	108	126	127
81	109	127	128
82	110	128	129
83	111	129	130
84	112	130	131
85	113	131	132
86	114	132	133
87	115	133	134
88	116	134	135
89	117	135	136
90	118	136	137
91	119	137	138
92	120	138	139
93	121	139	140
94	122	140	141
95	123	141	142
96	124	142	143
97	125	143	144
98	126	144	145
99	127	145	146
100	128	146	147
101	129	147	148
102	130	148	149
103	131	149	150
104	132	150	151
105	133	151	152
106	134	152	153
107	135	153	154
108	136	154	155
109	137	155	156
110	138	156	157
111	139	157	158
112	140	158	159
113	141	159	160
114	142	160	161
115	143	161	162
116	144	162	163
117	145	163	164
118	146	164	165
119	147	165	166
120	148	166	167
121	149	167	168
122	150	168	169
123	151	169	170
124	152	170	171
125	153	171	172
126	154	172	173
127	155	173	174
128	156	174	175
129	157	175	176
130	158	176	177
131	159	177	178
132	160	178	179
133	161	179	180
134	162	180	181
135	163	181	182
136	164	182	183
137	165	183	184
138	166	184	185
139	167	185	186
140	168	186	187
141	169	187	188
142	170	188	189
143	171	189	190
144	172	190	191
145	173	191	192
146	174	192	193
147	175	193	194
148	176	194	195
149	177	195	196
150	178	196	197
151	179	197	198
152	180	198	199
153	181	199	200

APPENDIX D

CROSS REFERENCE TABLE



TABLE D-1

Cross-Reference from Wheaton et al. (1978)  
Job-Objective-Numbers to Those Used  
in Appendix A

Wheaton et al. Number	Appendix A Number	Wheaton et al. Number	Appendix A Number
1	29	47	48
2	26	48	44
3	14	49	79
4	9	50	75
5	24	51	71
6	19	52	70
7	12	53	87
8	5	54	86
9	30	55	72
10	28	56	69
11	27	57	84
12	15	58	83
13	11	59	82
14	10	60	76
15	25	61	90
16	21	62	88
17	20	63	81
18	13	64	77
19	6	65	66
20	4	66	63
21	42	67	65
22	33	68	61
23	38	69	93
24	34	70	92
25	41	71	100
27	31	72	91
29	37	73	99
31	32	74	98
33	58	75	102
34	53	76	95
35	51	77	112
36	45	78	118
37	56	79	117
38	50	80	116
39	47	81	115
40	43	82	114
41	57	83	113
42	52	84	108
43	54	85	107
44	46	86	110
45	55	88	104
46	49	89	103

TABLE D-1 (cont'd.)

Cross-Reference from Wheaton et al. (1978)  
Job-Objective-Numbers to Those Used  
in Appendix A

Wheaton et al. Number	Appendix A Number	Wheaton et al. Number	Appendix A Number
90	105	137	175
92	120	138	170
94	122	139	166
97	121	140	171
100	163	141	172
101	164	142	209
102	161	143	205
103	146	144	204
104	149	145	208
105	144	146	199
106	162	147	195
107	159	148	210
108	165	149	207
109	160	150	206
110	145	151	202
111	142	152	200
112	150	153	197
113	143	154	216
114	155	155	215
115	157	156	214
116	154	157	212
117	134	158	213
118	137	159	211
119	131	200	192
120	156	201	185
121	152	202	181
122	158	203	188
123	153	204	187
124	135	205	183
125	129	206	180
126	136	207	186
127	132	208	184
128	176	209	189
129	178	210	182
130	174	211	191
131	167	212	190
132	168	213	220
133	169	214	217
134	177	215	221
135	173	216	218
136	179	217	222



TABLE D-1 (cont'd.)

Cross-Reference from Wheaton et al. (1978)  
Job-Objective-Numbers to Those Used  
in Appendix A

Wheaton et al. Number	Appendix A Number	Wheaton et al. Number	Appendix A Number
218	219	262	67
219	254	263	85
220	240	264	68
221	255	265	80
222	233	266	74
223	241	267	89
224	227	268	73
225	263	269	97
226	252	270	96
227	264	271	101
228	236	272	94
229	253	273	111
230	231	274	106
231	259	275	109
232	265	277	123
233	260	278	151
234	234	279	140
235	266	280	138
236	237	281	203
237	261	282	133
238	250	283	141
239	119	284	130
241	16	285	139
242	23	286	194
243	40	287	198
244	1	288	125
245	8	289	148
246	36	290	147
247	17	291	201
248	18	292	126
249	22	293	128
251	39	294	124
252	2	295	127
253	3	296	193
254	7	297	196
256	35	298	246
257	64	299	247
258	60	300	232
259	62	301	248
260	59	302	249
261	78	303	235

TABLE D-1 (cont'd.)

Cross-Reference from Wheaton et al. (1978)  
Job-Objective-Numbers to Those Used  
in Appendix A

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<u>Wheaton et al. Number</u>	<u>Appendix A Number</u>
304	244
305	245
306	229
307	238
309	256
310	262
311	230
312	251
313	224
314	257
315	228
316	243
317	226
318	239
319	223
320	242
321	225
322	258

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